Memorandum

To: Mayor and City Council

From: Ken Gibb, Community Development Director

Date: March 25, 2011

Subject: Legislative Amendment to the Land Development Code to Address FEMA Requirements (LDT10-00001)

I. ISSUE

Consider adoption of legislative revisions to the Corvallis Land Development Code to address new Federal Emergency Management Agency (FEMA) floodplain maps and regulations.

The proposed Land Development Code text changes, including the changes in development standards and land uses permitted within the 100-year Floodplain, apply Citywide to properties wholly or partially within the 100-year Floodplain **(Exhibit I)**. The 100-year Floodplain areas include those shown on FEMA's Flood Insurance Rate Maps (FIRMs), areas shown to be within the Corvallis 0.2-ft. Floodway, and areas on properties containing streams and located in areas where no FEMA study has yet been done (since there is a potential that 100-year Floodplain exists on these properties not yet studied by FEMA, federal Floodplain regulations would require further study in conjunction with a future development proposal to determine the extent of any 100-year Floodplain boundaries).

II. BACKGROUND

General -

The City of Corvallis has administered floodplain development standards for areas of the City inside of the FEMA 100-year Floodplain since prior to adoption of the 2006, Revised Land Development Code (LDC). Many of the regulations currently contained in Land Development Code Chapter 4.5 were taken directly from the federal regulations that a local jurisdiction must comply with in order to participate in the National Flood Insurance Program (NFIP). By adopting these regulations, all property owners within the City who must obtain flood insurance receive discounts on their policies. Presently, owners of property within the City of Corvallis qualify for a 10 percent reduction to the base discounted cost of flood insurance policies due to the package of floodplain development regulations already in place. The Oregon Department of Land Conservation (DLCD) conducted an outside assessment of those regulations in the City's current Land Development Code (LDC). This review was completed as part of the Federal Emergency Management Agency (FEMA)'s nationwide project to update the country's federal Flood Insurance Rate Maps (FIRMs).

Despite their general consistency with federal NFIP requirements, DLCD's assessment identified certain City regulations that must be updated in order for the regulations to be fully consistent

with the federal NFIP regulations. The City's regulations must be fully consistent with the federal NFIP regulations in order to remain eligible for participation in the NFIP.

In 2005, the Federal Emergency Management Agency (FEMA) began its nationwide project to update the country's Flood Insurance Rate Maps (FIRMs). On December 2, 2010, FEMA completed its process to update the Benton County Flood Insurance Study (FIS) and associated FIRM. The FIS and FIRM will be effective on June 2, 2011. As part of this map modernization process, FEMA digitized the current paper FIRM maps associated with the Benton County Flood Insurance Study. No new floodplain studies were done. The digitization of the FIRMs was based on local topographic maps and, as a result, some of the new floodplain boundaries are different than the boundaries shown on the current paper maps. The FEMA process for public review and comment on the FIRMs has already been completed and the new maps will be contained in the FEMA scientific engineering report entitled, *"The Flood Insurance Study for Benton County, Oregon and Incorporated Areas" dated June 2, 2011, with accompanying Flood Insurance Rate Map (FIRM)."*

FEMA FIRM Map Implementation -

As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011. If the City fails to do so, the community will be immediately removed from the NFIP **(Attachment B of Exhibit VI)**. Banks and insurance companies must also begin using the new FIRM maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through the Map Refinement process outlined in Section 4.5.90.

As mentioned, in some cases, the FEMA map modernization resulted in changes to flood zone boundaries. In such cases, the FEMA map updates will affect the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and will also affect the High Protection and Partial Protection Floodplain boundaries on the Natural Hazards Map (a component of the Zoning Map). Since these map revisions are mandated by FEMA, they are currently allowed through the Map Refinement procedures in Section 4.5.90 and do not require any formal land use process. Therefore, City staff are working with DLCD/FEMA staff, to implement the mapping changes by June 2, 2011, and the map revisions will not be addressed further in this staff report.

Legislative Amendment to the Land Development Code -

December 2, 2011, Letter of Final Determination - Because the revisions to the Flood Insurance Study (FIS) report for Benton County and the revised FIRM for the community have been completed, FEMA sent the City a Letter of Final Determination dated December 2, 2010, which stated certain additional requirements that must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within six months from the date of the FEMA letter. Prior to June 2, 2011, the City is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.). The NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature. In its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must

be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision **(Attachment B of Exhibit VI)**.
In its letter of December 2, 2010, FEMA also stated that some of the standards should already have been enacted by the City in order to establish eligibility in the NFIP, and additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have been previously adopted that meet or exceed the minimum requirements of 60.3(d).

Process for a Legislative Amendment to the Land Development Code - Land Development Code Section 1.2.80 outlines the process for amending the Land Development Code text. Section 1.2.80.01 states:

> **1.2.80.01 - Background**
>
> **This Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable policies.**

Comprehensive Plan Policy 1.2.1 states:

> **1.2.1 The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.**

Currently, the Land Development Code is not in conformance with the federal National Flood Insurance Program (NFIP) floodplain regulations. The proposed Legislative Amendment to the Land Development Code includes changes to bring the Land Development Code into conformance with the federal NFIP floodplain regulations. Given that the Land Development Code is out of conformance with the current federal NFIP floodplain regulations, public necessity, convenience, and general welfare require that it be amended to make it consistent with them (Comprehensive Plan Policy 1.2.1; LDC 1.2.80.01).

Land Development Code Section 1.2.80.02 states that a Land Development Code Text Amendment needs to be initiated by either the City Council or Planning Commission. Land Development Code Section 1.2.80.03 requires the Planning Commission and City Council to review a proposed LDC Text Amendment in accordance with the legislative provisions of Chapter 2.0 - Public Hearings.

January 3, 2011, City Council Initiation of Legislative Amendment to the Land Development Code - The FEMA stated that if the City fails to enact the necessary floodplain management regulations by June 2, 2011, it will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the Flood Disaster Protection Act of 1973, as

amended **(Attachment B of Exhibit VI)**. Since the DLCD review of the City's floodplain management program revealed some areas of the City's Land Development Code that needed to be revised to fully meet the NFIP requirements, the City needs to pursue Option #1, above, and the City Council initiated this Land Development Code Text Amendment on January 3, 2011 **(Attachments C and D of Exhibit VI)**.

February 2 & 16, 2011, Planning Commission Public Hearing for Legislative Amendment to the Land Development Code LDT10-00001 - At its February 2, 2011, meeting, the Planning Commission held a public hearing to consider the subject legislative Land Development Code Text Amendment. The Commission concluded the public hearing and held the written record open for seven days. At its February 16, 2011, meeting, the Planning Commission conducted deliberations on the matter and voted to recommend to the City Council approval, with modifications, of the proposed Text Amendment **(Exhibits III and V)**. The Commission-recommended modifications are outlined in the Planning Commission Notice of Disposition **(Order 2011-008 and Exhibit II)** and have been incorporated into **Exhibit I**.

Elements of Legislative Amendment to the Land Development Code - The most recent draft of the Oregon Model Floodplain Development Ordinance was developed by DLCD in coordination with FEMA and the state Building Codes Division, so that state-specific land use and building code provisions are integrated with federal NFIP floodplain regulations. This most recent draft is currently under review by FEMA. The DLCD has also been working with FEMA to ensure that existing development codes of jurisdictions affected by the map modernization process are consistent with current federal 100-year Floodplain regulations. As a result, DLCD has performed detailed reviews of existing floodplain development standards from each jurisdiction in Oregon, including the City of Corvallis, and identified areas of inconsistency.

Perhaps the most important of these identified issues for Corvallis is the need to create an independent Floodplain Development Permit program that will track development in the 100-year floodplain. While the City of Corvallis has been indirectly tracking development within the 100-year floodplain for many years, the information has not been kept separate from other building permits or permanently retained, as required by the federal regulations. City Staff have used the most recent draft of the Oregon Model Floodplain Development Ordinance as the basis for addressing the identified areas of inconsistency. This includes the creation of a Floodplain Development Permit process, with the goal of achieving consistency with state and federal NFIP floodplain regulations. The benefit of achieving a high level of consistency with these regulations is that it improves the community's chances for future additional flood insurance policy discounts. This means that those within the community who must pay for flood insurance would pay lower rates.

Working from the existing Land Development Code regulatory framework, the bulk of the required amendments to the Code occur within LDC Chapter 4.5 - Natural Hazard and Hillside Development Provisions. Changes to Chapter 1.4 - Nonconforming Development, Chapter 1.6 - Definitions, and Chapter 2.5 - Planned Development were also necessary to comply with the federal regulations and maintain consistency across these coordinated chapters. In addition, a new chapter, Chapter 2.11 - Floodplain Development Permit, was created to satisfy the federal requirement of a Floodplain Development Permit for most of the development activities that occur within the 100-year Floodplain. In general, Chapter 4.5 will continue to contain the standards applicable to development within the 100-year floodplain, while Chapter 2.11 will

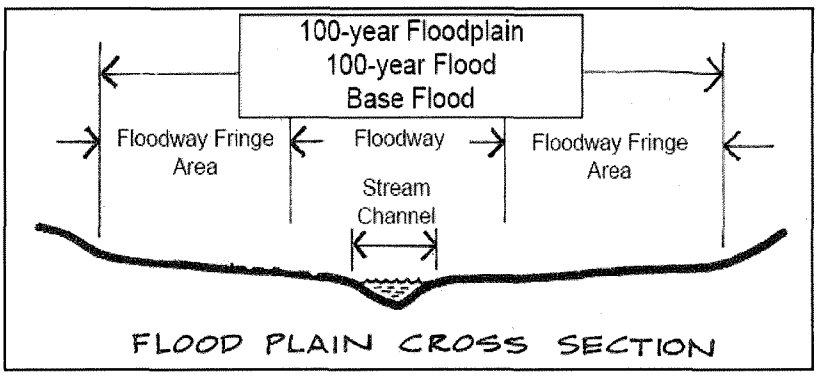
describe the process for obtaining the necessary permits. To facilitate a review of the proposed Legislative Amendment to the Land Development Code, citations from the relevant federal regulations (44 CFR) and sections of DLCD's most recent draft of the Oregon Model Floodplain Development Ordinance have been provided in each chapter at the end of new or modified text. Lastly, it should be noted that standards pertaining to landslide hazards and hillside development have been relocated to a new chapter, Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist both internal and external customers in finding the appropriate Code sections more easily. Those provisions have not been changed, but have simply been relocated.

Consistent with past practice, amended text in each of the Code chapters is depicted in one of two ways. New text is shown with a double underline (Floodplain Development Permit), while previously adopted text proposed for deletion is shown as struck through (~~1.0 ft. floodway~~). Although the entirety of Chapter 2.11 is new, none of the text in this chapter is shown with a double underline; doing so is unnecessary since the entire chapter is new.

Basic Components of 100-year Floodplain -

The Federal Emergency Management Agency (FEMA) defines the 100-year Floodplain as a community's Special Flood Hazard Area (SFHA). To assist in providing a framework for the discussions in this report, the actual federal definition for SFHA is listed below, along with definitions for the actual components of the 100-year Floodplain. These definitions are all included in the proposed new Land Development Code Section 1.6.40, within Chapter 1.6 - Definitions.

Special Flood Hazard Area (SFHA)	The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Federal Flood Zone designations on FIRMs include the letters A or V. Also known as the Special Flood Hazard Area (SFHA). See also "Floodplain, 100-year." *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Floodplain, 100-year	As shown below in Figure 1.6-16 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Administrator or designee is authorized through Sections 4.5.50.03.p and 4.5.60.01.b to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*  Figure 1.6-16 - Floodplain Cross Section

Floodway (Regulatory Floodway)	The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge and store the floodwater or flood flows associated with the regulatory flood.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]* **a.** **Floodway, 0.2-ft.** - As shown above in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the Water Surface Elevation more than 0.2 ft. The Regulatory Floodway for the City of Corvallis is the 0.2-ft. Floodway. **b.** **Floodway, 1.0-ft.** - As shown above in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the Water Surface Elevation more than 1.0 ft. The Federal Emergency Management Agency (FEMA) identifies the Regulatory Floodway as the 1.0-ft. Floodway, but also recognizes the City of Corvallis 0.2-ft. Floodway as the Regulatory Floodway for the City of Corvallis. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Floodway Fringe	As shown in Figure 1.6-16 - Floodplain Cross Section, the area of the 100-year Floodplain lying outside of the Floodway. Context is the 0.2-ft. Floodway, unless specifically identified as the 1.0-ft. Floodway. See Floodway (Regulatory Floodway) *[Current Code]*

III. DISCUSSION

A. Planning Commission Recommendation

During the Planning Commission public hearing, testimony was received both in support of and in opposition to the proposal **(Exhibits V and VII)**. The Planning Commission considered the testimony it received, made some modifications to the draft text as outlined in the Notice of Disposition **(Order 2011-008 and Exhibit II)**, and forwarded the proposed Legislative Amendment to the Land Development Code to the City Council with a recommendation for approval **(Exhibits II and III)**. The Commission provided the following rationale for its recommendation:

1. **Land Development Code's Implementation of the Federal NFIP Floodplain Regulations:** Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, Code Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Currently, the Land Development Code is not in conformance with the federal National Flood Insurance Program (NFIP) floodplain regulations. The proposed Legislative Amendment to the Land Development Code includes changes to bring the Land Development Code into conformance with the federal NFIP floodplain regulations. Given that the Land Development Code is out of conformance with the current

federal NFIP floodplain regulations, public necessity, convenience, and general welfare require that it be amended to make it consistent with them (Comprehensive Plan Policy 1.2.1; LDC 1.2.80.01).

2. **Map Changes:** As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011, or be immediately removed from the National Flood Insurance Program (NFIP). Banks and insurance companies must also begin using the new FIRM maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through its Map Refinement process outlined in Section 4.5.90. In some cases, the FEMA map modernization resulted in changes to flood zone boundaries. In such cases, the FEMA map updates will affect the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and will also affect the High Protection and Partial Protection Floodplain boundaries on the Natural Hazards Map (a component of the Zoning Map). Since these map revisions are mandated by FEMA, they are currently allowed through the Map Refinement procedures in Section 4.5.90 and do not require any formal land use process. Therefore, City staff are working with DLCD/FEMA staff, to implement the mapping changes by June 2, 2011. Because of these facts, the map changes are not subject to this Land Development Code Text Amendment process.

3. **Global Changes:** To fully implement the federal NFIP floodplain regulations, Code revisions need to occur throughout Articles I through IV of the LDC *globally* (i.e., to all parts of the LDC) to ensure consistent terminology and requirements. Chapter 1.1 - The City Council and Its Agencies and Officers, Chapter 1.2 - Legal Framework, and Chapter 1.3 - Enforcement all contain examples of "global changes" in that they now contain references to Floodplain Development Permits, the Floodplain Administrator or designee, etc. Another examples of such a "global change" includes the relocation of the landslide hazards and hillside development standards from Chapter 4.5 to a new chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist both internal and external customers in finding the appropriate Code sections more easily. However, this change also resulted in the need to change the name of the chapter and all the related Code section numbers in all the areas of the Code that addressed landslide hazards and hillside development.

   The renaming of Chapter 4.5 - Floodplain Provisions from Chapter 4.5 - Natural Hazards and Hillside Development to Chapter 4.5 - Floodplain Provisions required a "global change" to correct the chapter name and section number references throughout the Code. New definitions in Chapter 1.6 - Definitions created a need to correct terminology throughout the Code. The creation of a new Chapter 2.11 - Floodplain Development Permit brought out the need to reference this chapter and its requirements, where appropriate, throughout the Code. These examples are just a few of the "global" types of changes that need to occur as the result of this Legislative Amendment to the LDC.

Given the above, incorporation of the proposed "global changes" is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

4. **Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions:** Proposed amendments to Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions are due to federally required changes to existing definitions, as well as the addition of newly defined terms to Chapter 1.6. Within Chapter 1.4 - Nonconforming Development, the provisions related to the alteration or repair of a nonconforming structure have been changed to reflect modifications to the definitions of Substantial Improvement and Substantial Damage. The regulatory language addressing these situations has also been changed to directly refer to standards in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, rather than describing the scope of improvements required when structures are located in the 100-year Floodplain.

   In some cases, the federal NFIP regulations require definitions that are different from those of terms already contained in Chapter 1.6. For example, the term *"Development"* is defined by the federal NFIP regulations using language that is notably different from how it is currently defined in Chapter 1.6. Achieving consistency with the federal NFIP regulations requires the adoption of the definitions they contain. This results in the need to clarify how and when a term with two different definitions applies to various portions of the LDC. A new Section 1.6.40 in Chapter 1.6 - Definitions contains terms and their definitions that only apply to development within the 100-year Floodplain. However, there are terms outside of Section 1.6.40 that apply to development within the 100-year Floodplain, but also apply to development elsewhere within the community. In these instances, modifications to the existing definitions were made, where necessary, but the term was retained in the main list of definitions in Section 1.6.30.

   Given the above, incorporation of the proposed changes to Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

5. **Chapters 2.0 through 2.19:** Article II contains the provisions for each land use application type; from Annexations to Property Line Adjustments. Besides making the global changes necessary to reflect consistency with the primary chapters affected by the 100-year Floodplain amendments, Article II is proposed for expansion through the addition of Chapter 2.11 - Floodplain Development Permit. This new chapter contains the procedural requirements for the issuance of Floodplain Development Permits, which are required by the federal NFIP floodplain standards for most types of development. The new chapter also contains the procedural requirements for Floodplain Development Permit Variances. The existing LDC provisions allow for floodplain development standards to be varied through the Planned Development process. The addition of a Floodplain Development Permit Variance process does not supplant the opportunity for seeking variations through the Planned Development process, but rather defines a limited scope of Floodplain Development Permit Variances that

must be processed using the provisions in Chapter 2.11 - Floodplain Development Permit. Any Floodplain Development Permit Variance request that exceeds this limited scope would continue to be handled through the Planned Development process. Amendments to LDC Chapter 2.5 - Planned Development have been made consistent with this approach.

Given the above, incorporation of the proposed changes to Chapters 2.0 through 2.19 is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

6. **Chapters 3.0 through 3.38:** The only changes made to Chapters 3.0 through 3.38 are global in nature, and are required to maintain consistency with terms or section references from the primary Code chapters affected by the proposed 100-year Floodplain amendments. Therefore, incorporation of the proposed changes to Chapters 2.0 through 2.19 is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

7. **Chapters 4.0 through 4.14:** Chapters 4.0 through 4.14 contain all of the development standards not otherwise captured by chapters 3.0 through 3.38. These provisions cover such things as public improvements, parking, landscaping, lighting, solar access, signs, parking, pedestrian oriented design standards, natural resources and natural hazards, and Minimum Assured Development Area (MADA). While global changes to some of these chapters were necessary to reflect consistency with the primary chapters affected by the proposed 100-year Floodplain amendments, the most significant modifications are contained in Chapter 4.5 - Natural Hazards and Hillside Development Provisions. The chapter was renamed to Chapter 4.5 - Floodplain Provisions and all of the chapter's provisions pertaining to landslide hazards and hillsides were removed and relocated in the newly created Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Amendments to Chapter 4.11 - Minimum Assured Development Area are also proposed to reflect new provisions in Chapter 4.5 - Floodplain Provisions that clarify how MADA applies to areas of High Protection Floodway Fringe.

Extensive amendments are proposed to Chapter 4.5 - Floodplain Provisions. These effect every major section of the Chapter, including those that contain its purposes, applicability, procedures, construction standards, and provisions for map refinements and map corrections. New sections have also been added to address the federal NFIP requirement of designating a Floodplain Administrator, and to stipulate development standards for Critical Facilities, fences and walls, storage tanks, on-site sewage systems (e.g., septic systems), and temporary structures and storage. New provisions are also proposed that would regulate the conversion of potentially habitable spaces located at an elevation below the Base Flood Elevation.

The proposed Legislative Amendment to the Land Development Code includes changes to bring the Land Development Code into conformance with the federal NFIP floodplain regulations. Given that the Land Development Code is out of

conformance with the current federal NFIP floodplain regulations, public necessity, convenience, and general welfare require that it be amended to make it consistent with them (Comprehensive Plan Policy 1.2.1; LDC 1.2.80.01).

8. Compliance with Statewide Planning Goals:

The applicable Statewide Planning Goals include Goal 1 - Citizen Involvement; Goal 2 - Land Use Planning; Goal 6 - Air, Walter, and Land Resources Quality; and Goal 7 - Areas Subject to Natural Disasters and Hazards.

A. Goal 1 - Citizen Involvement - The purpose behind Statewide Planning Goal 1 is **"to develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process."** The City of Corvallis has a long history of active citizen involvement. The current Comprehensive Plan and Land Development Code were developed using extensive public processes. The purpose of this Legislative Amendment to the Land Development Code (LDT10-00001) is to implement federally mandated floodplain maps and regulations. Numerous articles about the anticipated changes to the floodplain maps and regulations were published over the past 1 ½ years in City publications such as *The City* and the Community Development Annual Report. Several presentations were also made to the Committee for Citizen Involvement to keep the members updated and solicit input. A public open house for all affected and potentially affected property owners was held in January, 2011. Additionally, training sessions for affected professionals such as surveyors, civil engineers, realtors, title companies, and insurance agents will be conducted in the next several months. Finally, all directly affected and potentially affected property owners were provided both legal and plain English public notices for the Planning Commission public hearing for this Amendment. Notice for both the Planning Commission and City Council public hearings were published in the local newspaper and those persons who submitted written testimony were mailed a City Council hearing notice. Given the above, the proposed Legislative Amendment to the Land Development Code (LDT10-00001) complies with Statewide Planning Goal 1, Citizen Involvement.

B. Goal 2 - Land Use Planning: The purpose behind Statewide Planning Goal 2 is **"to establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions."** Goal 2 outlines the basic procedures of Oregon's Statewide Planning Program. It states that land use decisions are to be made in accordance with a Comprehensive Plan, and that suitable "implementation ordinances" that are to put the Plan's policies into effect must be adopted.

The primary issue associated with the proposed Legislative Amendment to the Land Development Code (LDT10-00001) is the requirement of Statewide Planning Goal 2 that *"suitable implementation ordinances"* must

be adopted *"to put the Plan's policies into effect."* Currently, the Land Development Code is not in conformance with the federal National Flood Insurance Program (NFIP) floodplain regulations. The reason the Code is not in conformance is that the Federal Emergency Management Agency (FEMA) completed its process to update the Benton County Flood Insurance Study (FIS) and associated Flood Insurance Rate Map (FIRM). The revised FIS and FIRM will be effective on June 2, 2011. As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011, or be immediately removed from the NFIP. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through its Map Refinement process outlined in Section 4.5.90.

Also as outlined in its letter of December 2, 2010, FEMA requires the City to amend its land use regulations to ensure that they fully meet the federal NFIP floodplain regulations by June 2, 2011. The City is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.). The NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature. In its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision.

The FEMA stated that if the City fails to enact the necessary floodplain management regulations by June 2, 2011, it will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) o the Flood Disaster Protection Act of 1973, as amended. The City Council initiated this Land Development Code Text Amendment on January 3, 2011. Throughout the development of the proposed Legislative Amendment to the Land Development Code, Staff have worked closely with DLCD and FEMA staff to ensure that the proposed Amendment adequately implements the federal NFIP floodplain standards.

Given the above, there is an adequate factual base for making this land use decision. Additionally, local, state, and federal agencies were notified and their concerns were considered and addressed. The proposed implementation measures satisfy the FEMA direction. Consequently, the proposed Legislative Amendment to the Land Development Code complies with Statewide Planning Goal 2, Land Use Planning.

C. Goal 6 - Air, Water, and Land Resources Quality - The purpose behind Statewide Planning Goal 6 is **"to maintain and improve the quality of the air, water, and land resources of the State."** Goal 6 requires local

Comprehensive Plans and implementing measures to be consistent with State and Federal regulations relative to air, water, and land resources.

As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011, or be immediately removed from the NFIP. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through its Map Refinement process outlined in Section 4.5.90.

As mentioned under the Goal 2 analysis, above, FEMA also requires the City to fully implement the federal NFIP floodplain regulations by June 2, 2011, or be immediately removed from the NFIP. The City must adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.). The NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature. In its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision.

The proposed Legislative Amendment to the Land Development Code (LDT10-00001) is intended to fully implement the federal NFIP floodplain regulations. By giving special consideration to floodplain areas, where water and land resources are anticipated to interact, adoption of these measures is consistent with Statewide Planning Goal 6. Given the above, the proposed Amendment complies with Goal 6, Air, Water, and Land Resources Quality.

D. Goal 7 - Areas Subject to Natural Disasters and Hazards: The purpose behind Statewide Planning Goal 7 is **"to protect life and property from natural disasters and hazards."** For Corvallis, this is directed, in part, at areas subject to periodic flooding. With regard to this goal, the City is required to:

> **Address development in places subject to natural hazards such as floods or landslides. Requires that jurisdictions apply "appropriate safeguards" (flood plain zoning, for example) when planning for development there.**

Chapter 4.5 - Natural Hazards and Hillside Development Provisions and Chapter 1.6 -Definitions from the Land Development Code have long provided Corvallis' response to the Federal Emergency Management Administration mandates regarding areas in the community within the floodways and 100-year floodplains of the streams and rivers in Corvallis. These provisions have met the requirements of Goal 7 to date. However,

both DLCD and FEMA have identified some shortcomings in the City's floodplain provisions. These shortcomings make the City's current floodplain Code requirements inconsistent with the federal NFIP floodplain regulations.

The most recent draft of the Oregon Model Floodplain Development Ordinance was developed by DLCD in coordination with FEMA and the state Building Codes Division, so that state-specific land use and building code provisions are integrated with federal NFIP floodplain regulations. This most recent draft is currently under review by FEMA. The DLCD has also been working with FEMA to ensure that existing development codes of jurisdictions affected by the map modernization process are consistent with current federal 100-year Floodplain regulations. As a result, DLCD has performed detailed reviews of existing floodplain development standards from each jurisdiction in Oregon, including the City of Corvallis, and identified areas of inconsistency. The most important of these is the creation of an independent Floodplain Development Permit program that will track development in the 100-year floodplain. While the City of Corvallis has been indirectly tracking development within the 100-year floodplain for many years, the information has not been kept separate from other building permits or permanently retained, as required by the federal regulations. City Staff have used the most recent draft of the Oregon Model Floodplain Development Ordinance as the basis for addressing the identified areas of inconsistency, including the creation of a Floodplain Development Permit, with the goal of achieving consistency with state and federal NFIP floodplain regulations, thereby achieving the optimal level of regulation that improves the community's flood insurance policy discounts.

Working from the existing Land Development Code regulatory framework, the bulk of the required amendments to the LDC occur within LDC Chapter 4.5 - Natural Hazard and Hillside Development Provisions, which will be renamed to Chapter 4.5 - Floodplain Provisions. Changes to Chapter 1.4 - Nonconforming Development, Chapter 1.6 - Definitions, and Chapter 2.5 - Planned Development were also necessary to comply with the federal regulations and maintain consistency across these coordinated chapters. In addition, a new chapter, Chapter 2.11 - Floodplain Development Permit, was created to satisfy the federal requirement of a Floodplain Development Permit for many of the development activities that occur within the 100-year Floodplain. In general, Chapter 4.5 - Floodplain Provisions will continue to contain the standards applicable to development within the 100-year floodplain, while Chapter 2.11 - Floodplain Development Permit will describe the process for obtaining the necessary permits. To facilitate a review of the draft amendments, citations from the relevant federal regulations (44 CFR) and sections of DLCD's most recent draft of the Most recent draft of the Oregon Model Floodplain Development Ordinance have been provided in each Chapter at the end of new or modified text. Lastly, it should be noted that standards pertaining to landslide hazards and hillside development have been relocated to a new chapter, Chapter 4.14 -

Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist both internal and external customers find the appropriate Code sections more easily.

The proposed Legislative Amendment to the Land Development Code (LDT10-00001) is intended to fully implement the federal NFIP floodplain regulations. Given the above, the proposed Amendment complies with Goal 7, Areas Subject to Natural Disasters and Hazards.

Given the analysis presented above, the proposed Legislative Amendment to the Land Development Code complies with the applicable Statewide Planning Goals, identified as Goals 1, 2, 6, and 7.

IV. Staff Recommendation

The City Council has three options with respect to the LDC Text Amendment:

1) Approve the Legislative LDC Text Amendment as recommended by the Planning Commission **(Exhibit I)**;
2) Approve the Legislative LDC Text Amendment as modified by the City Council; or
3) Deny the Text Amendment.

Based on the recommendation of the Planning Commission to approve the LDC Text Amendment as presented in **Exhibit I**, and based on the information in this March 25, 2011, Memo, staff recommend the City Council chose Option #1 and approve the LDC Text Amendment as presented in **Exhibit I.** If the City Council accepts this recommendation, the following motion is suggested:

Motion

I move to approve the Legislative Amendment to the Land Development Code Text (LDT10-00001) contained in Exhibit I, subject to the approval of formal findings and an ordinance.

EXHIBITS

I. Planning Commission-recommended Legislative Amendment to the Land Development Code (LDT10-00001) - incorporates Planning-Commission recommended changes

II. February 17, 2011, Planning Commission Notice of Disposition

III. February 16, 2011, Planning Commission Minutes of the Planning Commission Deliberations

IV. February 15, 2011, Staff Memo to the Planning Commission Regarding Issues Raised

V. February 2, Planning Commission Minutes of the Planning Commission Public Hearing

VI. January 21, 2011, Staff Report to the Planning Commission

VII. Public Correspondence (Testimony Received and Correspondence with Staff)

A. February 2, 2011, Memo to Planning Commission with Additional Written Testimony Following the Release of the January 21, 2011, Staff Report

B. February 10, 2011, Memo to Planning Commission with Additional Written Testimony Following the Release of the February 2, 2011, Memo and Through the Close of the Written Record on February 9, 2011

C. February 16, 2011, Correspondence with Planning Commission Chair Jennifer Gervais

D. Correspondence Between Planning Commission's Close of Written Record on February 9, 2011 and March 25, 2011

Review and Concur

Jon Nelson, City Manager

3/24/11
Date

EXHIBIT I - PLANNING COMMISSION-RECOMMENDED LEGISLATIVE AMENDMENT TO THE LAND DEVELOPMENT CODE - INCORPORATES PLANNING COMMISSION-RECOMMENDED CHANGES FOR CHAPTERS 1.6, 2.11, AND 4.5

TABLE OF CONTENTS FOR LAND DEVELOPMENT CODE CHAPTERS THAT ARE BEING REVISED AS PART OF LDT10-00001.

HOWEVER, THE BULK OF THESE CHANGES ARE "HOUSEKEEPING" CHANGES TO REFLECT CHANGED CODE SECTION NUMBERS AND CODE CHAPTER NAME CHANGES. THE MAIN SUBSTANTIVE CHAPTERS WITH CHANGES INCLUDE:

- **CHAPTER 1.4 - NONCONFORMING DEVELOPMENT**
- **CHAPTER 1.6 - DEFINITIONS**
- **CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT** (NEW CHAPTER)
- **CHAPTER 4.5 - FLOODPLAIN PROVISIONS** (RENAMED CHAPTER & REVISED TO FULLY ADDRESS FEMA REGULATIONS AND ALSO MOVE THE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS TO A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)
- **CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS** (NEW CHAPTER THAT CONTAINS THE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS THAT WERE MOVED FROM THE OLD CHAPTER 4.5 - FLOODPLAIN PROVISIONS)

THE FULL LIST OF CHAPTERS (BOTH CHAPTERS WITH "HOUSEKEEPING" CHANGES AND THOSE WITH SUBSTANTIVE CHANGES) INCLUDES:

Chapter

ARTICLE I - GENERAL PROVISIONS

1.1	The City Council and its Agencies and Officers
1.2	Legal Framework
1.3	Enforcement
1.4	Nonconforming Development
1.6	Definitions

ARTICLE II - ADMINISTRATIVE PROCEDURES

2.0	Public Hearings
2.1	Comprehensive Plan Amendment Procedures
2.2	Zone Changes
2.3	Conditional Development
2.4	Subdivisions and Major Replats
2.5	Planned Development

2.6	Annexations
2.7	Extension of Services Outside the City Limits
2.10	Major Neighborhood Center Master Site Plan Requirements
2.11	~~Reserved~~ Floodplain Development Permit
2.12	Lot Development Option
2.13	Plan Compatibility Review
2.14	Partitions, Minor Replats, and Property Line Adjustments
2.19	Appeals

ARTICLE III - DEVELOPMENT ZONES

RESIDENTIAL ZONES

3.1	RS-3.5	Low Density Zone
3.2	RS-5	Low Density Zone
3.3	RS-6	Low Density Zone
3.4	RS-9	Medium Density Zone
3.5	RS-9(U)	Medium Density-University Zone
3.6	RS-12	Medium-high Density Zone
3.7	RS-12(U)	Medium-high Density-University Zone
3.8	RS-20	High Density Zone
3.9	(MUR)	Mixed Use Residential Zone
3.10	RS-1	Extra-low Density Residential Zone

COMMERCIAL AND OFFICE ZONES

3.11	(P-AO)	Professional and Administrative Office Zone
3.14	(NC)	Neighborhood Center Zone
3.15	(RF)	Riverfront Zone
3.16	(CB)	Central Business Zone
3.17	(CBF)	Central Business Fringe Zone
3.19	(MUCS)	Mixed Use Community Shopping Zone
3.20	(MUGC)	Mixed Use General Commercial Zone

INDUSTRIAL ZONES

3.21	(MUT)	Mixed Use Transitional Zone
3.22	(LI-O)	Limited Industrial - Office Zone
3.23	(LI)	Limited Industrial Zone
3.24	(GI)	General Industrial Zone
3.25	(II)	Intensive Industrial Zone
3.26	(RTC)	Research Technology Center Zone
3.27	(MUE)	Mixed Use Employment Zone

OVERLAYS

3.30	(WRG)	Willamette River Greenway Overlay

OTHER ZONES

3.36	(OSU)	Oregon State University Zone
3.37	(AG-OS)	Agriculture - Open Space Zone
3.38	(C-OS)	Conservation - Open Space Zone

ARTICLE IV - DEVELOPMENT STANDARDS

Chapter

4.0	Improvements Required with Development
4.1	Parking, Loading, and Access Requirements
4.2	Landscaping, Buffering, Screening, and Lighting
4.4	Land Division Standards
4.5	~~Natural Hazard and Hillside Development~~ Floodplain Provisions
4.6	Solar Access
4.7	Sign Regulations
4.8	Manufactured Dwelling Facility Standards
4.9	Additional Provisions
4.10	Pedestrian Oriented Design Standards
4.11	Minimum Assured Development Area (MADA)
4.13	Riparian Corridor and Wetland Provisions
4.14	Landslide Hazard and Hillside Development Provisions

EXHIBIT I - PROPOSED LDT - PAGE 3

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ORDINANCE 2011 – 01

AN ORDINANCE RELATING TO LAND USE, AMENDING THE CORVALLIS LAND DEVELOPMENT CODE TEXT TO ADDRESS NEW FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOODPLAIN MAPS AND REGULATIONS, ESTABLISHING FINDINGS, AMENDING ORDINANCE 93-20, AND DECLARING AN EMERGENCY (LDT10-00001)

WHEREAS, on January 3, 1985, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issued a Flood Insurance Rate Map (FIRM) that identified the Special Flood Hazard Areas (SFHAs) in the City of Corvallis as the areas subject to inundation by the base flood (flood that has a one percent chance of being equaled or exceeded in any given year);

WHEREAS, recently, FEMA completed a re-evaluation of flood hazards in the community and, on July 21, 2009, FEMA provided the City with preliminary copies of the Flood Insurance Study (FIS) report and FIRM that identify existing flood hazards in the community;

WHEREAS, FEMA did not receive any comments on the preliminary copies of the FIS report and FIRM and, accordingly, the FIS report and FIRM for the community will become effective on June 2, 2011;

WHEREAS, because the FIS report and FIRM for the community has been completed, FEMA sent the City a Letter of Final Determination dated December 2, 2010, which stated certain additional requirements that must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within six months from the date of the FEMA letter;

WHEREAS, prior to June 2, 2011, the City is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragragh 60.3(d) of the NFIP regulations (44 CFR 59, etc.);

WHEREAS, the NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature:

WHEREAS, in its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision;

WHEREAS, in its letter of December 2, 2010, FEMA stated that some of the standards should already have been enacted by the City in order to establish eligibility in the NFIP, and additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

EXHIBIT I - PROPOSED LDT - PAGE 5

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have been previously adopted that meet or exceed the minimum requirements of 60.3(d);

WHEREAS, if the City fails to enact the necessary floodplain management regulations by June 2, 2011, it will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) o the Flood Disaster Protection Act of 1973, as amended;

WHEREAS, in addition to the community using the FIS report and FIRM to manage development in the floodplain, FEMA will use the FIS report to establish appropriate flood insurance rates and, on the effective date of the revised FIRM (June 2, 2011), actuarial rates for flood insurance will be charged for all new structures and substantial improvements to existing structures located in the identified SFHAs;

WHEREAS, these rates may be higher if structures are not built in compliance with the floodplain management standards of the NFIP;

WHEREAS, the actuarial flood insurance rates increase as the lowest elevations (including basements) of new structures decrease in relation to the Base Flood Elevations established for the community, and this is an important consideration for new construction because building at a higher elevation can greatly reduce the cost of flood insurance;

WHEREAS, the FIS report and FIRM for the community have been prepared in FEMA's countywide format, which means that flood hazard information for all jurisdictions within Benton County, Oregon, has been combined into one FIS report and FIRM;

WHEREAS, when the FIS report and FIRM are printed and distributed by FEMA, the City will receive only those panels that present flood information for the City, and FEMA will provide complete sets of the FIRM panels to Benton County officials, where they will be available for review by the City;

WHEREAS, the new FIRM panels have been computer-generated and, once the FIS report and FIRM are printed and distributed, the digital files containing flood hazard data for the entire county can be provided to the City for use in a computer mapping system. These files can be used in conjunction with other thematic data for floodplain management purposes, insurance purchase and rating requirements, and many other planning applications;

WHEREAS, the City may be eligible for additional credits under FEMA's Community Rating System if the City implements its activities using digital mapping files;

WHEREAS, the Oregon Department of Land Conservation and Development (DLCD) coordinated with FEMA to ensure that existing land development codes of jurisdictions affected by the FEMA map modernization process are consistent with current federal and state 100-year floodplain regulations.

WHEREAS, the DLCD review of the City's floodplain regulations concluded that the City's land use regulations were not in full compliance with all the standards of Paragraph 60.3(d) of the NFIP regulations, and directed the City to update its land use regulations to be in full compliance;

WHEREAS, on March 15, 2010, the City Council approved the Planning Division Work Plan that recognized the need for a legislative Amendment to the Land Development Code to address the revised FIS report and FIRM maps, as well as the all the standards of Paragraph 60.3(d) of the NFIP regulations;

WHEREAS, on January 3, 2011, the City Council initiated legislative Amendment to the Land Development Code LDT10-00001 to address the revised FIS report and FIRM maps, as well as the all the standards of Paragraph 60.3(d) of the NFIP regulations;

WHEREAS, both the Comprehensive Plan Map and the Land Development Code Official Zoning Map include a Natural Hazards Overlay; and a Natural Hazards Map has been adopted as part of the Corvallis Land Development Code Official Zoning Map;

WHEREAS, the City's Land Development Code requires use of the most current FEMA Flood Insurance Rate Maps (FIRMs) as part of the City's floodplain management program;

WHEREAS, Land Development Code Section 4.5.90 contains provisions for Map Refinements that allow refinements to the actual boundaries of some Natural Hazards, including 100-year Floodplain boundaries in accordance with FEMA regulations, and Map Refinements are accomplished Ministerially on the relevant maps, with no land use process;

WHEREAS, once the revised FIRM mapping information has been reflected on the City's Comprehensive Plan Map and Land Development Code Official Zoning Map, inclusive of the Natural Hazards Map, through the Ministerial Land Development Code Map Refinement procedures, then the Land Development Code text constitutes the only remaining City regulations that need to be modified to fully comply with all the standards of Paragraph 60.3(d) of the NFIP regulations;

WHEREAS, the Planning Commission conducted, after proper legal notice, a public hearing on February 2, 2011, and deliberations on February 16, 2011, to consider the Legislative Amendment (LDT10-00001) to the Corvallis Land Development Code Text and interested persons and the general public were given an opportunity to be heard. The Planning Commission has reviewed all matters presented and has provided its recommendation to the City Council;

WHEREAS, the City Council conducted, after proper legal notice, a public hearing on April 4, 2011, and deliberations on _____, 2011, concerning the

proposed changes to the Corvallis Land Development Code Text, and interested persons and the general public were given an opportunity to be heard;

WHEREAS, the complete staff report to the City Council, dated March 25, 2011, including exhibits; and those portions of the minutes of the April 4, 2011, public hearing and the _____, 2011, deliberations, containing the staff presentations and deliberations by the Council that demonstrate support for the proposed Legislative Amendment to the Land Development Code Text (portion of LDT10-00001) are by reference incorporated herein and are hereby adopted by the City Council;

NOW THEREFORE, THE CITY OF CORVALLIS ORDAINS AS FOLLOWS:

Section 1. Exhibit A, a detailed set of findings regarding the Legislative Amendment to the Land Development Code Text (LDT10-00001) is incorporated in and made part of this Ordinance.

Section 2. The existing Land Development Code is hereby amended as shown in Exhibit B of this Ordinance, as summarized in "i," below, and subject to the further revisions outlined in Section 3, below. Exhibit B is incorporated in and made part of this Ordinance.

i. Summary of Amendments

1. Revising Chapter 4.5 & New Chapter 4.14 -

   i) Renaming Chapter 4.5 to *"Chapter 4.5 - Floodplain Provisions;"*
   ii) Updating it to fully address the federal floodplain standards;
   iii) Removing the hillside development and landslide hazard provisions & placing them in a new Code chapter entitled *"Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;"*
   iv) Properties containing streams and located in areas where no FEMA studies have been done, but where 100-year Floodplain potentially exists, may be required to perform floodplain studies during the development process. If 100-year Floodplain areas are discovered on these properties, then the new floodplain regulations will apply;

2. Revising Chapter 1.6 - Definitions - Updating to add new definitions and modify existing ones to fully comply with the applicable federal floodplain regulations;

3. Revising Chapter 2.5 - Planned Development - Updating to address floodplain regulation variations exceeding the scope of the federally mandated Floodplain Development Permit Variance process;

4. Creating a New Chapter 2.11 - Floodplain Development Permit -

   i) Required to address the federally mandated Floodplain Development Permit process. The National Flood Insurance Program (NFIP) regulations require a Floodplain Development Permit for all proposed construction and other development in 100-yr. floodplain areas of the community;
   ii) The Floodplain Development Permit process will be proposed as a staff-level process, similar to Building Permits;
   iii) Including the federally mandated Floodplain Development Permit Variance process, which is limited in scope, but involves discretion. This process would be a public hearing process, with review by the Land Development Hearings Board;

5. Housekeeping Changes to Remainder of the Code to Address Changes in 1-4, Above - "Housekeeping" changes will need to occur throughout the Code to accommodate the changes in 1-4, above.

Section 3. Revise text per City Council direction as outlined in Exhibit C of this Ordinance. Exhibit C is incorporated in and made part of this Ordinance.

Section 4. Ordinance 93-20 as amended is hereby amended.

Section 5. Emergency Clause. The earliest imposition of the provisions of this ordinance is necessary to preserve the peace, health, and safety of the public. Accordingly, an emergency is declared, and this ordinance will take effect immediately upon its passage by the Council and approval by the Mayor.

PASSED by the Corvallis City Council this ____ day of May, 2011.

APPROVED by the Mayor this ____ day of May, 2011.

EFFECTIVE DATE: _____, 2007

_____
Mayor

ATTEST:

_____
City Recorder

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EXHIBIT A

DETAILED FINDINGS FOR LDT10-00001

(TO BE DEVELOPED FOLLOWING BOTH PLANNING COMMISSION AND CITY COUNCIL PUBLIC HEARING PROCESSES FOR LDT10-00001. THE FINDINGS WILL REFLECT THE CITY COUNCIL RATIONALE FOR ITS DECISION REGARDING LDT10-00001)

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EXHIBIT B

LAND DEVELOPMENT CODE TEXT CHANGES FOR LDT10-00001

INCLUDES PLANNING-COMMISSION-RECOMMENDED CHANGES FOR CHAPTERS 1.6, 2.11, AND 4.5

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EXCERPT

CHAPTER 1.1
THE CITY COUNCIL AND ITS AGENCIES AND OFFICERS

Section 1.1.10 - THE CITY COUNCIL

1.1.10.01 - Authority and Responsibility

The State has delegated to the City Council responsibility for adopting land use plans and controls. The City has adopted this Code pursuant to its responsibilities to secure the health, safety, and welfare of its citizens and also pursuant to its home rule authority. The City Council has created a Planning Commission, a Land Development Hearings Board, and a Historic Resources Commission to implement such plans and controls. In addition, the state has authorized the Council to act upon applications for development or to delegate its authority to act upon such applications.

1.1.10.02 - Powers and Duties

The City Council has the following powers and duties in addition to any others it may now have, be given, or confer upon itself. The City Council:

a. May adopt, amend, supplement, or repeal plans and policies for development of the community;

b. May adopt, amend, supplement, or repeal the text of any provisions or regulations of this Code or the boundaries of zones established on the Official Zoning Map;

c. Shall review decisions of the Planning Commission, Land Development Hearings Board, and Historic Resources Commission upon appeal;

d. Shall appoint members of the Planning Commission and Historic Resources Commission; and

e. May establish a reasonable schedule of fees with respect to matters under this Code.

Section 1.1.20 - THE PLANNING COMMISSION

The Planning Commission, appointed in accordance with the Boards and Commissions Ordinance, Corvallis Municipal Code Section 1.16.235, shall have the powers and duties provided therein and provided by this Code.

Section 1.1.30 - LAND DEVELOPMENT HEARINGS BOARD

The Land Development Hearings Board shall hear and act on appeals resulting from alleged errors in orders, requirements, decisions, and interpretations of the Director or designated administrative officers, such as the Floodplain Administrator or designee, charged with the enforcement of this Code and other matters as required by this Code.

1.1.30.01 - Membership

a. All members of the Planning Commission are eligible to serve on the Land Development Hearings Board. The Land Development Hearings Board shall consist of three members appointed from the Planning Commission by the chair of the Planning Commission. One member shall be appointed to a one-year term, one to a two-year term, and one to a three-year term. All succeeding appointments shall be three-year terms or until the appointees are no longer members of the Planning Commission, whichever comes first.

b. Any vacancy on the Board shall be filled by an appointment by the Planning Commission chair for the unexpired portion of the term of the Board member whose office became vacant.

c. The members of the Land Development Hearings Board shall continue as voting members of the Planning Commission.

d. The chair of the Planning Commission may appoint alternates to serve in the absence of Board members.

1.1.30.02 - Quorum

Two members of the Land Development Hearings Board shall constitute a quorum. Any position in the Land Development Hearings Board may be filled, or a substitution made, to allow any members of the Planning Commission to serve for purposes of a quorum.

1.1.30.03 - Powers and Duties

The Land Development Hearings Board shall conduct hearings and prepare findings of fact in accordance with Chapter 2.0 - Public Hearings and take such actions concerning appeals as required by this Code.

Section 1.1.40 - HISTORIC RESOURCES COMMISSION

The Historic Resources Commission shall be appointed in accordance with Municipal Code Section 1.16.325, as amended over time. The Commission shall have the powers and duties provided therein and provided by this Code.

CHAPTER 1.2
LEGAL FRAMEWORK

Section 1.2.10 - RULES OF CONSTRUCTION

This Code shall be construed liberally in order to achieve its purposes. Unless specifically prescribed otherwise in this Code, the following provisions shall govern its interpretation and construction:

a. When consistent with the context, words in the present tense include the future, words in plural include the singular, and words in singular include the plural.

b. Unless specified otherwise in this Code, any action authorized or required to be taken by the City may be accomplished by the Council or by an official or agent designated by the Council.

Section 1.2.20 - SEVERABILITY AND CONSTITUTIONALITY

If any section, subsection, sentence, clause, or phrase of this Code is for any reason held illegal, invalid, or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions hereof. The Council hereby declares that it would have passed this Code and each section, subsection, sentence, clause, and phrase hereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared illegal, invalid, or unconstitutional.

Section 1.2.30 - DESCRIPTIVE HEADINGS

The paragraph captions and headings in this Code are for convenience and reference purposes only and shall not affect in any way the meaning or interpretation of this Code.

Section 1.2.40 - CALCULATION OF TIME

Where the performance of any act, duty, matter, or payment is required and the period of time or duration for the performance is prescribed and fixed, the time shall be computed to exclude the first day and include the last day of the prescribed or fixed period or duration of time. When the last day of the period falls on Saturday, Sunday, or a legal holiday, that day shall be omitted from the computation. The word "day" means calendar day unless specified otherwise.

Section 1.2.50 - SAVINGS CLAUSE

The amended Corvallis City Ordinance 93-20, which is repealed by the ordinance adopting this Code, shall remain in force to authorize the arrest, prosecution, conviction, and punishment of a person who violates Corvallis City Ordinance 93-20, as amended, prior to the effective date of this Code.

Section 1.2.60 - REVIVAL

The repeal of Corvallis City Ordinance 93-20, as amended, does not thereby revive any provision, ordinance, or section that was in effect prior to the adoption or amendment of Corvallis City Ordinance 93-20 as amended. This repeal does not affect any punishment, penalty, or fine incurred before the repeal took place or any prosecution or proceeding commenced or pending prior to the adoption of this Code.

Section 1.2.70 - NONDISCRIMINATION

The City shall not discriminate on the basis of race, religion, national origin, age, color, gender, sexual orientation, or physical disability in the administration or enforcement of this Code.

Section 1.2.80 - TEXT AMENDMENTS

1.2.80.01 - Background

This Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable policies.

1.2.80.02 - Initiation

An amendment may be initiated through one of the following methods:

a. Majority vote of the City Council; or

b. Majority vote of the Planning Commission.

1.2.80.03 - Review of Text Amendments

The Planning Commission and City Council shall review proposed amendments in accordance with the legislative provisions of Chapter 2.0 - Public Hearings.

Section 1.2.90 - THE OFFICIAL ZONING MAP

Zone Boundaries established by this Code are shown on the Official Zoning Map, which is on file in the Community Development office. The City's Official Zoning Map shall be the City's geographic information system (GIS) version of the Zoning Map, as retained by the City's Mapping and GIS Services Division, and as adopted on December 31, 2006, and amended from time to time. The Official Zoning Map and all amendments and other matters entered on the Official Zoning Map are a part of this Code and have the same legal effect as if fully set out herein.

1.2.90.01- Amendments

Amendments to the Official Zoning Map shall be adopted as provided in Chapter 2.2 - Zone Changes. After adoption of an amendment, the Director shall alter the Official Zoning Map to indicate the amendment.

1.2.90.02 - Interpretation of Zone Boundaries

Zone boundaries shown on the Official Zoning Map shall be located as described in the ordinance or order establishing and amending such zone boundaries. Public streets and highways shall not be zoned, nor shall private streets be zoned unless specifically included within a particular zone. If uncertainty exists as to the boundaries of the zones, and the uncertainty is not resolved by the ordinance or orders that establish and amend such boundaries, the following rules shall apply:

a. Boundaries indicated as approximately following property lines shall be construed as following such lines;

b. Boundaries indicated as approximately following railroad lines shall be construed as midway between the main track or tracks;

c. Boundaries indicated as following the contours of certain elevations or soils of a particular type shall be construed as following the actual height or soil contour as determined by accepted surveying practices;

d. Boundaries indicated as parallel to, or extensions of natural or human-made features indicated in "a," through "c," above, shall be so construed as following these features;

e. Where a boundary between zones is present on a lot or parcel, the portions of the lot within the given zone shall be subject to the applicable uses and development standards of that zone. If a boundary between zones is present on a lot or parcel and neither portion of the lot or parcel is developable under the applicable zone, then a property owner may petition the Land Development Hearings Board to apply one or the other zone to the entire lot or parcel. Such a petition shall follow the procedures and review criteria established for a zone change in Chapter 2.2 - Zone Changes; and

f. Boundaries indicated as approximately following the center lines of alleys, streams, rivers, lakes, or other bodies of water shall be construed as following such center lines.

Where uncertainties continue to exist after application of the above rules, the Land Development Hearings Board shall determine the location of such boundaries.

Section 1.2.100 - DEVELOPMENT REVIEW FEES

1.2.100.01 - Required Fees

The Director is authorized to charge and collect fees for the provision of municipal services outlined in this Code. The City Council shall set fees in accordance with the Council's financial policies and shall charge no more than the actual or average cost of providing planning and development review services in accordance with ORS 227.175(1), as amended. The Director shall maintain a current schedule of fees for public review.

1.2.100.02 - Annual Review

Development review fees shall be reviewed annually and revised to reflect the change in costs to the City for wages and benefits of appropriate represented employees in the current fiscal year. The annual adjustment of fees shall be effective January 1 of each year.

Section 1.2.110 - DEVELOPMENT REVIEW PROCESS

1.2.110.01 - Ministerial Development

Ministerial Development includes nondiscretionary development activities that are permitted outright, subject to compliance with the criteria and standards of this Code. Floodplain Development Permits processed in accordance with Chapter 2.11 - Floodplain Development Permit, and t~~T~~hose Uses that are listed in the zones in Article III as Permitted Uses are Ministerial Development activities. These Floodplain Development Permit applications and Uses require staff review upon application for a Floodplain Development Permit and/or a Building Permit and are subject to those zoning standards and other development provisions of this Code and applicable City ordinances and requirements which are objective and not subject to the exercise of discretion. These standards and provisions include the clear and objective standards and provisions from all acknowledged City-adopted plans such as the Transportation Plan, the public facilities master plans, the Parks Master Plan, etc. Applicants should also be aware that in addition to review under this Code by the City, these Floodplain Development Permit applications and Uses are subject to all applicable Federal and State standards and regulations, such as the Uniform Building and Fire Codes, regulations by the State Department of Environmental Quality (DEQ), the State Department of State Lands (DSL), the Federal Emergency Management Agency (FEMA), etc. Land use approval under this Code will not include approval under these regulations. Applicants must seek approval from the appropriate body for each of these regulations. Review of Floodplain Development Permits and Building Permits shall be accomplished according to Ministerial Development procedures.

1.2.110.02 - General Development

General Development includes development activities that require at least some discretion. General Development requires less discretion than Special

Development and involves review and approval by staff without a public hearing. General Development requires public notice prior to a staff decision. A Notice of Disposition is provided to persons who respond in writing to the public notice. Except for decisions on Residential Subdivisions, and Director-level Historic Preservation Permits, appeals are made to the Land Development Hearings Board and City Council in accordance with Chapter 2.19 - Appeals. Notwithstanding any other language in this Code to the contrary, for Residential Subdivisions, appeals are made to the Planning Commission and then the City Council. As with Ministerial Development, approval of a General Development use is subject to zoning standards and other development provisions of this Code and City ordinances and requirements.

General Development activities that may be approved by staff without a public hearing are described in the following sections of Article II - Administrative Procedures:

Chapter 2.2	-	Zone Changes - limited to Administrative Zone Changes. See Section 2.2.50 for procedures.
Chapter 2.3	-	Conditional Development - limited to Conditional Development Modification. See Section 2.3.40 for procedures.
Chapter 2.4	-	Subdivisions and Major Replats - limited to Residential Subdivisions and Subdivision Modifications. See Sections 2.4.30 and 2.4.80, respectively, for procedures.
Chapter 2.5	-	Planned Development - limited to Minor Planned Development Modifications, Conceptual Development Plan Nullifications for residentially designated property, and Expedited Land Divisions. See Sections 2.5.60, 2.5.80.a, and 2.5.100, respectively, for procedures.
Chapter 2.9	-	Historic Preservation Provisions - limited to Director-level Historic Preservation Permits. See Section 2.9.90 for procedures.
Chapter 2.10	-	Minor Master Site Plan Modification. See Section 2.10.50 for procedures.
Chapter 2.12	-	Lot Development Option. See Section 2.12.30 for procedures.
Chapter 2.13	-	Plan Compatibility Review. See Section 2.13.30 for procedures.
Chapter 2.14	-	Partitions, Minor Replats, and Property Line Adjustments. See Section 2.14.30 for procedures.
Chapter 2.16	-	Request for Interpretations. See Section 2.16.30 for procedures.
Chapter 2.18	-	Solar Access Permits. See Section 2.18.40 for procedures.

1.2.110.03 - Special Development

Special Development includes development activities that require considerable discretion. It involves a public hearing, in accordance with the provisions of Chapter 2.0 - Public Hearings, as well as approval by an established hearing authority. As with Ministerial Development, approval of a Special Development use is subject to zoning standards and other development provisions of this Code and City ordinances and requirements.

Special Development activities are described in the following sections of Article II - Administrative Procedures:

Chapter 2.1	-	Comprehensive Plan Amendments. See Section 2.1.30 for procedures.
Chapter 2.2	-	Zone Changes. See Sections 2.2.30 and 2.2.40 for procedures.
Chapter 2.3	-	Conditional Development. See Section 2.3.30 for procedures.
Chapter 2.4	-	Subdivisions and Major Replats. See Section 2.4.30 for procedures.
Chapter 2.5	-	Planned Developments - limited to Conceptual and Detailed Development Plans, Major Planned Development Modifications, Conceptual Development Plan Nullifications not addressed by Section 2.5.80.a, Detailed Development Plan Nullifications, and Refinement Plans. See Sections 2.5.40, 2.5.50, 2.5.60, 2.5.80.b, and 2.5.90, respectively, for procedures.
Chapter 2.6	-	Annexations. See Section 2.6.30 for procedures.
Chapter 2.7	-	Extension of City Services Outside the City Limits. See Section 2.7.50 for procedures.
Chapter 2.8	-	Vacating of Public Lands and Plats. See Section 2.8.40 for procedures.
Chapter 2.9	-	Historic Preservation Provisions - limited to HRC-level Historic Preservation Permits. See Section 2.9.90 for procedures.
Chapter 2.10	-	Major Neighborhood Center Master Site Plan Review - limited to Master Site Plans and Major Master Site Plan Modifications. See Sections 2.10.40 and 2.10.50.03, respectively, for procedures.
Chapter 2.11	-	Floodplain Development Permit Variance. See Section 2.11.50 for procedures.

1.2.110.04 - Conditions of Approval

Conditions of Approval placed on developments shall be based upon Comprehensive Plan and this Code criteria.

Section 1.2.120 - ROUGH PROPORTIONALITY

If an applicant intends to assert that he/she cannot legally be required, as a condition of Building Permit or development approval, to provide easements, dedications, or improvements at the level otherwise required by this Code, the Building Permit or site plan review application shall include a Rough Proportionality Report submitted by the applicant and prepared by a qualified civil or traffic engineer, or qualified professional in the field of the issue in question as appropriate, showing:

a. The estimated extent, on a quantitative basis, to which the improvements will be used by persons served by the building or development, whether the use is for safety or convenience;

b. The estimated level, on a quantitative basis, of improvements needed to meet the estimated extent of use by persons served by the building or development;

c. The estimated impact, on a quantitative basis, of the building or development on the public infrastructure system of which the improvements will be a part; and

d. The estimated level, on a quantitative basis, of improvements needed to mitigate the estimated impact on the public infrastructure system.

For Building Permits that do not involve any City planning processes, the applicant shall submit the report outlined above during the time of its related appeal period. For Building Permits that do involve City planning processes, the applicant shall submit the report either during the period following the staff review committee (SRC) meeting and prior to the mailing of the public notice; or during the regular appeal period associated with such planning applications. Appeal processes are outlined in Chapter 2.19 - Appeals.

Section 1.2.130 - EXTENSION OF 120-DAY PERIOD FOR REVIEW OF LAND USE APPLICATIONS

Consistent with state law, the City's review of all land use applications subject to Oregon Revised Statute 227.178, as amended, shall be completed within 120 days of the date an application is deemed complete, allowing for any possible appeals at the local level. This 120-day period may be extended only by written authorization of the applicant. Such authorization shall specify the length of time by which the 120-day deadline is extended.

CHAPTER 1.3
ENFORCEMENT

Section 1.3.10 - RESPONSIBLE OFFICER

This Code shall be administered and enforced by the Director, except that matters relating to Chapters 2.11 - Floodplain Development Permit and 4.5 - Floodplain Provisions may also be administered and enforced by the Floodplain Administrator or designee.

Section 1.3.20 - BUILDING PERMIT

No Building Permit shall be issued by the Building Official for any development unless the Director or Floodplain Administrator or designee, as applicable, has determined that the:

a. Proposed development complies with the provisions of this Code, including any Conditions of Approval established by the authority of the City Council, the Planning Commission, the Land Development Hearings Board, the Historic Resources Commission, or otherwise authorized by this Code, City Ordinances, or state law;

b. Proposed development complies with all applicable City ordinances and requirements, including all City-adopted plans such as the Transportation Plan, the public facilities master plans, the Park and Recreation Facilities Plan, etc.;

c. Proposed development complies with the Building and Fire Codes; and

d. Required Special or General Development permit(s) have been issued.

It is the applicant's responsibility to ensure that Building Permit applications are consistent with applicable state and federal standards and regulations, such as those of the State Department of Environmental Quality (DEQ), the State Department of State Lands (DSL), etc., that are not regulated by the City through this Code, City ordinances and requirements, and/or Conditions of Approval.

Section 1.3.30 - CERTIFICATE OF OCCUPANCY

No certificate of occupancy shall be issued by the Building Official for any development unless all requirements of this Code have been met, including any Conditions of Approval established by the authority of the City Council, the Planning Commission, the Land Development Hearings Board, the Historic Resources Commission, or otherwise authorized by this Code, City Ordinances, or state law, or until the applicant has provided some written form of assurance acceptable to the Director or Floodplain Adminstrator or designee, as applicable, and guaranteeing the completion of all requirements.

Section 1.3.40 - NONCOMPLIANCE WITH THE APPROVED DEVELOPMENT PLANS

If the Director or Floodplain Administrator or designee, as applicable, determines that a development substantially differs from the approved plans or the provisions of this Code, including any Conditions of Approval established by the authority of the City Council, the Planning Commission, the Land Development Hearings Board, the Historic Resources Commission, or otherwise authorized by this Code, City Ordinances, or state law, the Director or Floodplain Administrator or designee, as applicable, shall notify the developer and Building Official in writing. Thereafter, the Building Official may issue orders to the developer as are within the range of authority available to the Building Official, and upon continued non-compliance may withhold site development permits and/or Building Permits for further construction or revoke those permits previously issued until compliance is achieved.

Section 1.3.50 - STOP WORK ORDER

Whenever any work is done contrary to the provisions of this Code, including any Conditions of Approval established by the authority of the City Council, the Planning Commission, the Land Development Hearings Board, the Historic Resources Commission, or otherwise authorized by this Code, City Ordinances, or state law, the Director or Floodplain Administrator or designee, as applicable, may order the work stopped by notice in writing served on any persons engaged in the work, and any such persons shall immediately stop such work until authorized by the Director or Floodplain Administrator or designee, as applicable, to proceed.

Section 1.3.60 - VIOLATIONS

Use of land in the City of Corvallis not in accordance with the provisions of this Code, including any Conditions of Approval established by the authority of the City Council, the Planning Commission, the Land Development Hearings Board, the Historic Resources Commission, or otherwise authorized by this Code, City Ordinances, or state law, constitutes a violation. Upon receiving information concerning a violation of this Code, the Director or Floodplain Administrator or designee, as applicable, may conduct an investigation to determine whether a violation exists. The Director or Floodplain Administrator or designee, as applicable, may request the assistance of other City agencies and officers in conducting such investigations.

The Director or Floodplain Administrator or designee, as applicable, may prepare and deliver to the City Attorney a request for prosecution indicating the location and nature of the suspected violation, applicable Code sections, and other information provided by the staff.

1.3.60.01 - Classification of Violation

Violations shall be identified by the Director or Floodplain Administrator or designee, as applicable, under one of the following classifications:

a. **Type I** - Violations which represent a serious threat to public health, safety, and welfare, or those unapproved actions deemed potentially to create serious adverse environmental or land use consequences as the result of continued development activity; or

b. **Type II** - Violations which do not pose a serious threat to public health, safety, and welfare, but do violate provisions of this Code, including any Conditions of Approval, as described in Section 1.3.60 above.

1.3.60.02 - Notice of Violation

a. **Type I** - After receiving a report of an alleged Type I violation, the Director or Floodplain Administrator or designee, as applicable, will determine whether the violation requires that a citation be issued immediately or whether to provide notice of the violation prior to the issuance of a citation. Notice shall be in writing and shall be provided to the owner of record for tax purposes or to the person in charge of the property. Such a notice shall indicate the following:

1. Location and nature of the violation; and

2. Provision or provisions of this Code or Conditions of Approval which allegedly have been violated; and

3. Whether immediate enforcement will be sought or if a specified time period will be allowed to correct or remove the violation.

b. **Type II** - After receiving a report of an alleged Type II violation from the Director or Floodplain Administrator or designee, as applicable, the City Attorney shall, if he/she determines that probable cause exists, promptly give notice of the alleged violation by certified first-class mail, return receipt requested, or by personal service to the owner of record for tax purposes and to the person in charge of the property. Such a notice shall indicate the following:

1. Location and nature of the violation; and

2. Provision or provisions of this Code or Conditions of Approval which allegedly have been violated; and

3. Whether immediate enforcement shall be sought or if 15 days will be allowed to correct or remove the violation; and

4. The date when the notice was personally served or, if the notice was sent by first-class mail, the date three days after mailing if the address to which it was mailed is within this state and seven days after mailing if the address to which it was mailed is outside this State. However, a defect in the notice of violation with respect to this notice delivery provision shall not prevent enforcement of this Code.

1.3.60.03 - City Attorney to Pursue Enforcement

When the compliance deadline expires, the City Attorney shall proceed with any legal or equitable action deemed appropriate unless:

a. It has been demonstrated to the City Attorney that the violation has been corrected, removed, or will not be committed; or

b. A court of competent jurisdiction has halted enforcement pending the outcome of a proceeding concerning the violation.

1.3.60.04 - Penalties

Code violations may be subject to criminal, civil, or other sanctions authorized under ordinance of the City.

a. **Criminal Penalties** - Unless specified otherwise , every violation of the terms of this Code is a Class A infraction, punishable by a fine of up to $500.00. Each day such violation continues shall be considered a separate offense. Sign Code violations are addressed in Chapter 4.7- Sign Regulations.

b. **Civil Penalties and Remedies** - In addition to, or in lieu of, criminal actions, a violation of this Code or a permit issued hereunder may be the subject of a civil action in the nature of a debt or of any appropriate remedy issuing from a court of competent jurisdiction, including mandatory and prohibitory injunctions and orders of abatement. Sign Code violations are addressed in Chapter 4.7- Sign Regulations.

1. The Director or Floodplain Administrator or designee, as applicable, is authorized to impose a civil penalty of up to $1,000.00 for any violation of this Code.

2. In imposing a penalty amount pursuant to the schedule authorized by this section, the Director or Floodplain Administrator or designee, as applicable, shall consider the following factors:

   a) The history of the person incurring a penalty in taking all feasible steps or procedures necessary or appropriate to correct any violation;

   b) Any prior violations of statutes, rules, orders, and permits pertaining to development regulations;

   c) The economic and financial conditions of the person incurring a penalty;

   d) The gravity and magnitude of the violation,

   e) Whether the violation was repeated or continuous; and

   f) Whether the cause of the violation was an unavoidable accident, negligence, or an intentional act.

3. Imposition and enforcement of civil penalties is not an exclusive remedy, but shall be in addition to any other procedures or remedies provided by law. Imposition or payment of a civil penalty under this section shall not bar any criminal proceeding authorized under this ordinance.

4. A civil penalty shall be imposed under this section by issuance of a notice of penalty. A civil penalty may be imposed for each 30 days the condition continues. The notice of penalty shall be provided in the manner as described under "5," below.

5. Any civil penalty imposed under this section shall become due and payable when the notice of penalty is served upon the person incurring the penalty. Service shall be by personal service or by certified mail, return receipt requested, to the last known address of the person incurring the penalty. The notice of penalty shall include a:

a) Reference to the particular provision or law violated;

b) Statement of the matters asserted or charged;

c) Statement of the amount of the penalty or penalties imposed;

d) Statement of the owner's right to appeal the penalty; and

e) Statement that if the penalty is not paid within the time required under "10," below, the penalty and any costs of service and recording fees shall be recorded by the City Recorder in the City Lien Docket and shall become a lien on the property of the person incurring the penalty.

6. If the notice of penalty is returned to the City without service upon the named person, the Director or Floodplain Administrator or designee, as applicable, shall post a notice of penalty on the premises where the violation has occurred. The notice shall be posted so as to be visible from the public right-of-way and shall be delivered to a person, if any, occupying the premises. The posted notice shall be affixed to the premises and shall also indicate that tampering or removal of the notice shall constitute a misdemeanor.

7. The person to whom the notice of penalty is issued shall have 20 days from the date of service of the notice in which to appeal the penalty before the municipal judge, after which time the notice of penalty becomes a final order. The appeal shall be as provided in "8," and "9," below.

8. Any appeal shall be in writing and signed by the person against whom the penalty has been assessed or the attorney for that person. The appeal shall state the grounds of the appeal. The appeal shall be accompanied by a deposit in the amount of the civil penalty assessed and an appeal fee of $50.00. The appeal shall be filed with the municipal court and served upon the City Attorney. Failure to comply with these provisions shall result in the appeal's dismissal.

9. The only issues to be decided by the municipal judge are determinations of whether the condition of the property was as alleged in the notice of penalty and if so, whether that condition violated this Code. If the judge finds that the alleged condition existed at the time and date specified on the notice of penalty, and that the

condition violated this Code, the municipal judge shall issue an order affirming the penalty. The order shall contain a provision for court costs to be paid by the violator in the amount of $100.00. If the judge finds that the condition alleged in the notice of penalty did not exist at the time and date specified on the notice, the municipal judge shall void the notice of penalty. The order voiding the notice of penalty shall provide for return of the deposit, including the appeal fee. The judge's order is final.

10. Unless the amount of penalty imposed under this Section is paid within 10 days after the notice of penalty or the order becomes final by operation of law or after appeal, the order shall constitute a lien on the owner's subject property and shall be recorded in the City Lien Docket. Where the service has been made by certified mail or other means providing a receipt, the returned receipt shall be attached to and made a part of the recorded order. The penalty and any added costs imposed by the order become a lien upon the real property. That lien shall have priority over all other liens and encumbrances of any form. The lien shall accrue interest at the rate applicable for municipal assessment liens from the date of docketing until clearance. The lien may be foreclosed on and the property sold as may be necessary to discharge the lien in the manner specified in ORS 223.505 through 223.650, as amended.

11. Any lien for a civil penalty shall be released when the full amount determined to be due has been paid to the City, the owner or person making such payment shall receive a receipt stating that the full amount of penalties, interest, recording fees, and service costs have been paid, and that the lien is thereby released and the record of the lien satisfied.

1.3.60.05 - Tampering with Official Notices.

a. No person shall remove or tamper with a notice posted on property pursuant to the provisions of this chapter unless authorized by the Director or Floodplain Administrator or designee, as applicable.

b. A violation of this provision shall be a Class "C" misdemeanor.

CHAPTER 1.4
NONCONFORMING DEVELOPMENT

Section 1.4.10 - BACKGROUND

As used in the Code, Nonconforming Development includes Nonconforming Structures and Nonconforming Uses. A Nonconforming Structure does not fully comply with zoning provisions for setbacks, building height, and/or off-street parking, or does not fully comply with some other standard of the zone. A Nonconforming Use is not permitted outright or has not received conditional approval in the zone in which it exists, but was lawfully begun prior to its becoming nonconforming.

Within the development zones established by this Code, development may exist that was lawful at the time it began, but would be nonconforming and prohibited in the future under the terms of this Code or future amendments.

In order to avoid undue hardship to developers, nothing in this Code shall be deemed to require a change in the plans, construction, or designated use of any building on which actual construction was lawfully begun prior to the effective date of adoption or amendment of this Code and upon which actual building construction has been carried out diligently. Construction is considered to have started if excavation, demolition, or removal of an existing building has begun in preparation for rebuilding, and a Building Permit has been acquired, prior to the effective date of adoption or amendment of this Code.

Section 1.4.20 - PURPOSES

a. Permit Nonconforming Development to continue, but not to encourage its perpetuation.

b. Ultimately bring development into conformance with this Code and the Comprehensive Plan.

Section 1.4.30 - NONCONFORMING STRUCTURES

1.4.30.01 - Alteration of a Nonconforming Structure

Where the use of a structure is permitted by the applicable zone but the structure is nonconforming, an alteration, expansion, or relocation may be Ministerially approved if the improvement, evaluated separately from the existing structure, would be in compliance, and is not within a Vision Clearance Area as defined in Chapter 1.6 - Definitions, and/or as determined by the City Engineer.

For structures in existence prior to December 31, 2006, reconstruction of structures (both residential and nonresidential) may occur consistent with how the structures previously existed in their nonconforming state, **except for the following:**

a. Any Substantial Improvement to a Nonconforming Structure located within the 100-year Floodplain shall conform to the provisions of Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Natural Hazard and Hillside Development Provisions and shall be accompanied by bringing the entire structure into conformance with those provisions. These requirements apply ~~raising the Finished Grade of any nonhabitable space to an elevation at or above the Base Flood Elevation, and raising the Lowest Floor of any habitable space to an elevation one ft. above the Base Flood Elevation. This requirement for raising the Lowest Floor of a Nonconforming Structure applies~~ to all Nonconforming Structures within the 100-year Floodplain, regardless of when the structure(s) was originally constructed, and irrespective of any prior improvements to the Nonconforming Structures~~See Chapter 1.6 - Definitions for a definition of Substantial Improvement. Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, Substantial Improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft. Floodway~~; and *[Code Structure and consistency with existing provisions in Chapter 4.5, as well as other LDT changes]*

b. Where a structure is designated as Designated Historic Resource, any alteration, expansion, enlargement, extension, reconstruction, relocation, or demolition shall be consistent with the provisions in Chapter 2.9 - Historic Preservation Provisions.

1.4.30.02 - Damage to a Nonconforming Structure within the 100-Year Floodp~~P~~lain

If a Nonconforming Structure within the 100-year Floodplain is Substantially Damaged, then the provisions of Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Natural Hazard and Hillside Development Provisions apply and shall be accompanied by bringing the entire structure into conformance with those provisions. These provisions apply to all Nonconforming Structures within the 100-year Floodplain, regardless of when the structure(s) was originally constructed, and irrespective of any prior damage to the Nonconforming Structures.~~the Finished Grade of any nonhabitable space shall be raised to an elevation at or above the Base Flood Elevation and the Lowest Floor of any habitable space shall be raised to an elevation one ft. above the Base Flood Elevation.~~ See Chapter 1.6 - Definitions for a definition of Substantial Damage.~~ Note: Pursuant to Section~~

~~4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, Substantial Improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft.-Floodway.~~ *[Code Structure and consistency with existing provisions in Chapter 4.5, as well as other LDT changes]*

Section 1.4.40 - NONCONFORMING USES

1.4.40.01 - Alterations of a Nonconforming Use

No building, structure, or land area devoted to a Nonconforming Use shall be expanded. Reconstruction, relocation, or structural alteration shall conform to the provisions of this Code. Nothing in this Chapter shall be construed as prohibiting normal repair, maintenance, and nonstructural alterations to such development, nor the alteration, strengthening, or restoration to safe condition as may be required by law.

1.4.40.02 - Continuance of a Nonconforming Use

A Nonconforming Use shall not be expanded or relocated to a different or greater area of land, buildings, or structures than it occupied at the time it became nonconforming. Additionally, where a Nonconforming Use exists on a site, its Use Type may continue to exist, provided it is in accordance with the provisions of this Code.

1.4.40.03 - Discontinuance of a Nonconforming Use

Whenever a Nonconforming Use is discontinued for more than 18 months, further use shall conform with the provisions of this Code. For purposes of this Code, rental payments or lease payments and taxes shall not be considered a continued use. Discontinued shall mean non-use and shall not require a determination of the voluntary or involuntary nature of the discontinuance or the intent to resume the Nonconforming Use.

1.4.40.04 - Damage to a Nonconforming Use

If a structure containing a Nonconforming Use is Substantially Damaged, any future development on the site shall use a Use Type conforming to those allowed within the applicable zone in which it is located. See Chapter 1.6 - Definitions for a definition of Substantial Damage.

1.4.40.05 - Reclassification to Conditional Development

Whenever a Nonconforming Use is permitted conditionally, it shall be reclassified as conforming upon receipt of an approved Conditional Development application in accordance with Chapter 2.3 - Conditional Development.

Section 1.4.50 - EXCEPTIONS

1.4.50.01 - Commercial Uses in RS-12 Zone Along SW 3rd, SW 5th, and SW 6th Streets

a. Specific Commercial Use Types in existence on individual sites as of December 31, 2006, in the RS-12 Zone along SW 5th and SW 6th Streets from SW Adams Avenue to Western Boulevard, shall not be classified as Nonconforming Development.

b. Specific Commercial Use Types in existence on individual sites as of December 31, 2006 (*e.g.*, Automotive and Equipment - Light Equipment Repairs), in the Mixed Use Community Shopping (MUCS) Zone at 2220 SW 3rd Street (Assessor's Map #12-5-11BC, Taxs Lot 700 and 701), shall not be classified as Nonconforming Development. Upon further development, perimeter buffers shall be established consistent with Mixed Use Community Shopping (MUCS) Zone standards.

1.4.50.02 - Existing Uses

Uses that were permitted by the underlying zone prior to a subject property's re-zoning via ZDC00-00009 (the Zoning Map changes related to the Code Update Project), shall not be classified as Nonconforming Development unless the use(s) on the subject property has been discontinued for a period of more than 18 months, in which case Section 1.4.40.03 shall apply.

1.4.50.03 - Office Uses in the RS-9, RS-9(U), RS-12, RS-12(U), and RS-20 Zones

Office Uses, defined in Chapter 1.6 - Definitions, in existence as of December 31, 2006, in the RS-9, RS-9(U), RS-12, RS-12(U) and RS-20 zones shall not be classified as Nonconforming Development.

1.4.50.04 - North Campus Area (defined in Chapter 1.6 - Definitions)

a. Multi-dwellings in existence as of December 31, 2006, shall not be classified as Nonconforming Development. However, redevelopment or expansion

requires compliance with current parking standards contained in Chapter 4.1- Parking, Loading, and Access Requirements.

b. Office Uses, defined in Chapter 1.6 - Definitions, in existence as of December 31, 2006, shall not be classified as Nonconforming Development. However, redevelopment or expansion requires compliance with current parking standards contained in Chapter 4.1- Parking, Loading, and Access Requirements.

1.4.50.05 - Nonconforming Lots of Record

A lot of record may not meet the lot size requirements of the zone in which it is located. Such a lot may be occupied by a Use permitted in the zone. If, however, the lot is smaller than the size required in its zone, Residential Use shall be limited to one dwelling unit or to the number of dwelling units consistent with density requirements of the zone.

1.4.50.06 - Street and Drainageway Dedications

The act of conveyance to or appropriation by the City for street or drainage purposes shall not in itself render as nonconforming the use of land, structure, or other improvement maintained upon a lot.

1.4.50.07 - Nonconforming Duplexes

Where a Duplex fails to meet the Building Type requirements in the zone in which it is located, and has been Substantially Damaged as described in Chapter 1.6 - Definitions, it may be reconstructed provided such reconstruction commences within one year of the Substantial Damage and complies with required development standards.

1.4.50.08 - Residential Uses

Any residential Building Type permitted prior to December 31, 2006 by this Code, but which is no longer allowed as a new use, may be modified, enlarged or rebuilt, provided it complies with required development standards of the zone.

1.4.50.09 - OSU Campus Buildings

Any buildings on the OSU Campus existing or approved prior to December 31, 2006 shall not be classified as Nonconforming Development, notwithstanding the height limitations established in the Primary and Secondary Transition Areas of the OSU Zone.

CHAPTER 1.6
DEFINITIONS

Section 1.6.10 - GENERAL MEANING OF WORDS

All words and terms assume their dictionary definitions unless they are specifically defined in this Code or the context in which they are used clearly indicates to the contrary.

Section 1.6.20 - COMMON WORDS

a. All words in present tense include the future tense.

b. All words in plural include the singular, and all words in singular include the plural unless the context clearly indicates to the contrary.

c. The word "shall" is mandatory and the word "may" is permissive.

d. The word "building" includes the word "structure."

e. The phrase "used for" includes the phrases "arranged for," "designed for," "intended for," "maintained for," and "occupied for."

f. The words "land" and "property" are used interchangeably unless the context clearly indicates to the contrary.

g. The words “lot” and “parcel” are used interchangeably unless the context clearly indicates to the contrary.

Section 1.6.30 - SPECIFIC WORDS AND TERMS

Abutting Properties - Two or more properties joined by a common boundary line or point, as shown in Figure 1.6-1 - Abutting and Adjacent Lots.

Access - Place, means, or way by which ingress and egress are provided. See also definition for Solar Access.

Accessory Dwelling - See Chapter 4.9 - Additional Provisions.

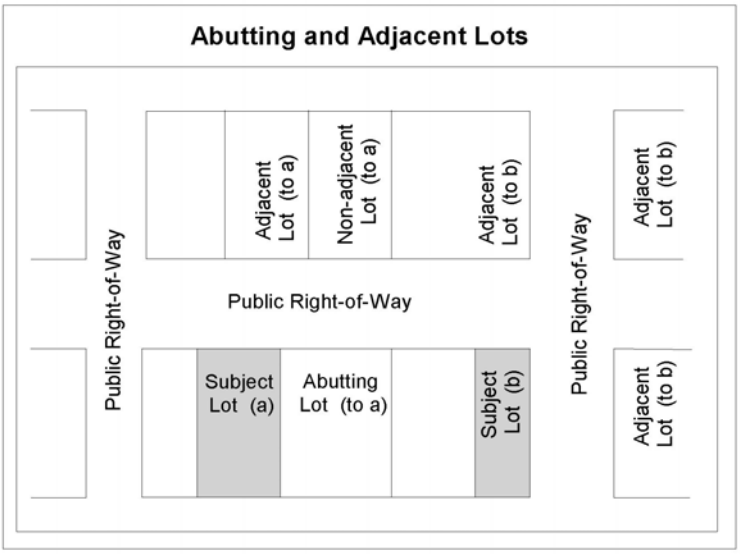


Figure 1.6-1 - Abutting and Adjacent Lots

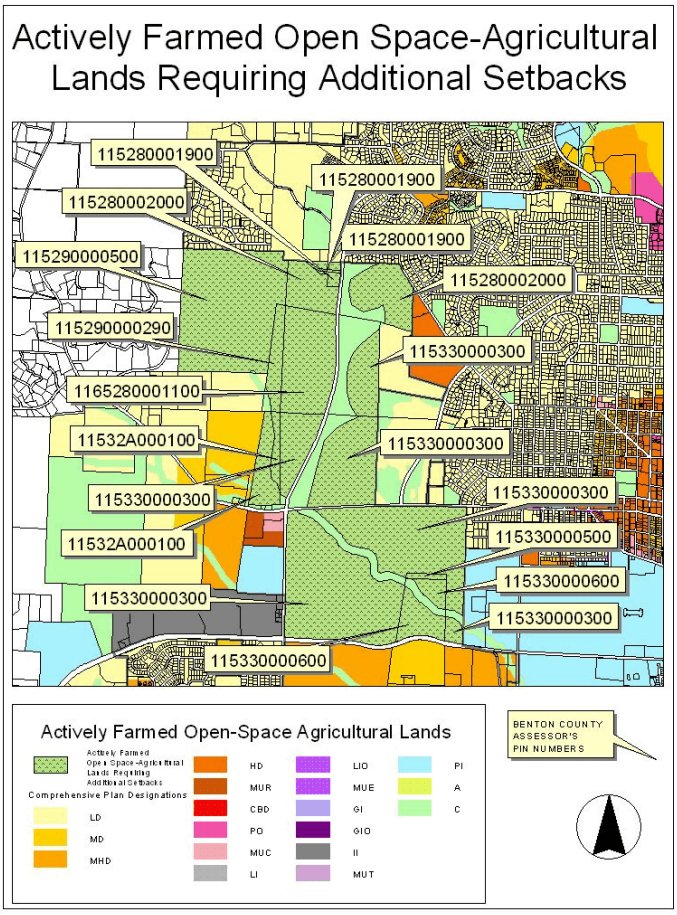
Accessory Structure - Structure customarily incidental and subordinate to the main use of a property and located on the same lot as the main use; freestanding and structurally separated from the main use.

Accessory Use - Use customarily incidental and subordinate to the main use of a property and located on the same lot or site as the main use.

Accessway - Narrow strip of land connecting a parcel to a public street right-of-way or a private street located within its own separate tract. The accessway ensures access to the parcel. Actual pavement widths within an accessway are in accordance with the City's Off-street Parking and Access Standards established by and available through the City Engineer and amended over time.

Acre - Unit of land equal to 43,560 sq. ft.

Actively Farmed Open Space-Agricultural Lands - Properties that are designated as Open Space-Agricultural on the Comprehensive Plan Map and are used for Agricultural Uses as defined in Section 3.0.30.05. For the purposes of requiring additional OS-AG setbacks, the setback requirements are limited to sites next to lands designated as OS-AG on the Comprehensive Plan Map and listed in the Benton County Assessor's Office as the Oregon State University Lands identified (on December 31,2006) as Parcel Identification Numbers: 115290000500;115280002000; 115290000290; 115280001100; 115280001900; 115280001100; 115330000300; 11532A000100; 115330000500; or 115330000600 as shown.



Actual Construction - Permanent placing and fastening of construction materials.

Adjacent - Adjacent properties are either abutting or, in the absence of right-of-way, would be considered abutting. Uses are considered adjacent if they exist on adjacent properties, as shown in Figure 1.6-1 - Abutting and Adjacent Lots.

Administrative Zone Change - Amendment to the boundaries of zones shown on the Official Zoning Map. A detailed definition for an Administrative Zone Change is contained in Section 2.2.50.b. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Section 2.2.50 - Quasi-Judicial Change Procedures for Administrative Changes.

Affordable Housing - Housing for which ownership costs (mortgage loan principal, interest, property taxes, and insurance) or rental costs (unit rent and utilities) require no more than 30 percent of the gross monthly income of a household that has income at or below 80 percent of the Corvallis area median. The Corvallis area median is calculated annually by the U.S. Department of Housing and Urban Development (HUD) and applied based on household size. These numbers are updated annually by HUD and are on file in the City's Housing Division.

Agriculture - Nursery, horticulture, and similar activities for the cultivation of commercial crops; pasturing, breeding, dairying, and similar uses of animals; and poultry farming for commercial use. Specific Agricultural Use Types are defined in Section 3.0.30.05 - Agricultural Use Types.

Alley - Public or private right-of-way designed and intended to serve as secondary access to the side or rear of those properties having a street as primary access.

Alteration - Change, addition, or modification in construction or occupancy of a building or structure.

Annexation - Land use process that evaluates whether a property meets the criteria for incorporation into the City limits and meets the requirements to be forwarded to the voters for a final decision on its incorporation. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.6 - Annexations. The State of Oregon can mandate, without voter approval, the annexation of property on which a health hazard exists. See Health Hazard Annexation.

Apartment - Dwelling unit located within a Multi-dwelling, but excluding condominiums. See Multi-dwelling under Building Types.

Application - Materials submitted or to be submitted.

Area, Gross - Total area of a parcel or site, usually expressed in acres.

Area, Net - Total area of a parcel or site, usually expressed in acres and excluding existing public street rights-of-way and, if a developer desires, excluding public parks, Significant Natural Feature areas dedicated to the public, and/or other areas permanently precluded from development due to development constraints or conservation easements. Planned streets shall not be excluded from the net area.

Area of Shallow Flooding - See "Area of Shallow Flooding" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Area of Special Flood Hazard - See "Special Flood Hazard Area" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Average Setback (weighted by length of wall) - Formula for determining Average Setback is as follows: $AS = (y_1 \times SD_1) + (y_2 \times SD_2) + (y_n \times SB_n)$, as shown below in Figure 1.6-2 - Average Setback, where:

AS	=	Average Setback
y	=	Percent of wall length at a particular distance from property line
SD	=	Setback Distance (actual distance from the property line)

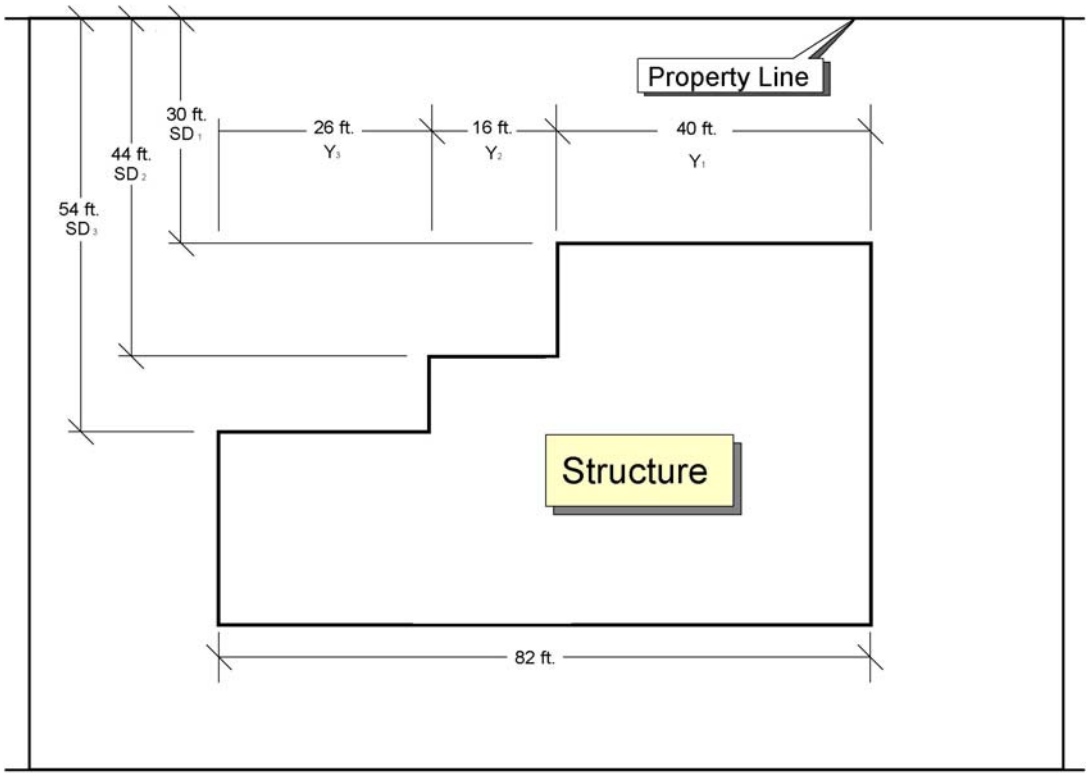


Figure 1.6-2 - Average Setback

Example: Average Setback = 40.34 ft.

y_1	=	40 ft. ÷ 82 ft. = 0.4878% = 49%
SD_1	=	30 ft.
y_2	=	16 ft. ÷ 82 ft. = 0.1951% = 19%
SD_2	=	44 ft.
y_3	=	26 ft. ÷ 82 ft. = 0.3171% = 32%
SD_3	=	54 ft.

(0.4878 X 30) + (0.1951 X 44) + (0.3171 X 54) = 40.34 ft. Average Setback

Base - Lowest (and often widest) visible part of a building, often distinctively treated. A base is distinguished from a foundation or footing in being visible rather than buried.[1]

Base Flood - ~~Flood that has a one percent chance of occurring in any given year. Also commonly referred to as the 100-year Flood, the Base Flood has been adopted by the Federal Emergency Management Agency (FEMA) for Floodplain management purposes, and refers to a flood event that inundates the entire 100-year Floodplain. See Floodplain, 100-Year and Flood, 100-Year.~~ See "Base Flood" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Base Flood Elevation - See "Base Flood Elevation" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Basement - See "Basement" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Basin - Topographical entity within which all the surface water draining to a certain point falls; some of the surface water may come from ground water fed by geologic strata outside the Basin.

Bed and Breakfast - See Home Business for Bed and Breakfast businesses that rent up to two bedrooms within owner-occupied dwellings. See Section 3.0.30.03.u.3 for other Bed and Breakfast businesses.

Below-grade Crawlspace - See "Below-grade Crawlspace" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Best Management Practices - Strategies for improving runoff water quality that are accepted throughout the industry . They include structural and nonstructural measures to control pollutants at the source before they enter a stream.

a. Structural BMPs include:
1. Retention Basins
2. Detention Basins
3. Constructed Wetlands
4. Infiltration Practices
5. Filters
6. Bioretention
7. Biofilters (swales and filter strips).

b. Nonstructural BMPs include:
1. Street sweeping
2. Illicit connection identification and elimination
3. Public education and outreach
4. Land use modifications to minimize the amount of impervious surface area

[1] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

5. Waste collection
6. Proper materials storage.

Beneficial Uses - Beneficial Uses assigned by basin in the Oregon Administrative Rules for water quality and for Corvallis streams are as follows: public and private domestic water supplies, industrial water supplies, irrigation, livestock watering, anadromous fish passage, salmonids fish rearing and spawning, resident fish and aquatic life, wildlife and hunting, fishing, boating, water contact recreation, aesthetic quality, and hydro power, unless changed through a use attainability analysis.

Bioswale - Constructed shallow, wide vegetated ditch through which storm runoff travels and that uses natural methods of cleaning water such as sediment trapping and microorganism activity to remove pollutants.

Block - Tract of land bound by a connecting network of public or private streets with sidewalks. When necessary to minimize impacts to a designated wetland, to slopes greater than 15 percent, to parks dedicated to the public, and/or to Significant Natural Features, blocks may be bound by walkways without streets.

Bond - Form of security in an amount and form satisfactory to the City. See Performance Guarantee in Section 2.4.40.09.

Buffer - Area designed to provide space or distance, obstruct undesirable views, serve as an acoustic barrier, or generally reduce impacts of adjacent development.

Building - Structure having a roof supported by columns or walls and used or intended for the shelter, housing, or enclosure of any individuals, animals, processes, equipment, goods, or materials of any kind.

Building Codes - See "Building Codes" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Building Elevation - Scale drawing of the side, front, or rear of a given structure.

Building Envelope - Portion of a lot or development site exclusive of the areas required for front, side, and rear yards and other required open spaces; and which is available for siting and constructing a building or buildings.

Building Height - See Height of Buildings.

Building Line - Line on a plat indicating the limit beyond which buildings or structures may not be erected, or the minimum distance as prescribed by this Code between the property line abutting a street and the closest point of the foundation of any related building or structure.

Building Official - Development Services Manager.

Building Types -

a. **Nonresidential** - Group of building types comprising the following:

1. Detached - One main building, freestanding and structurally separated from other buildings.

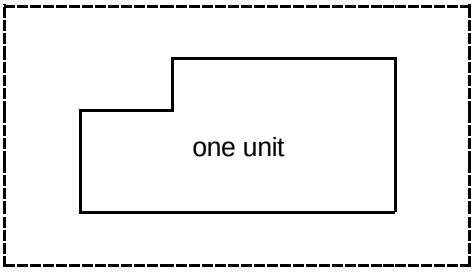


Figure 1.6-3 - Nonresidential Detached

2. Attached - Two or more main buildings placed side by side so that some building walls are in common for a minimum length of five ft. Fences, trellises, etc. attached between buildings do not create Attached structures.

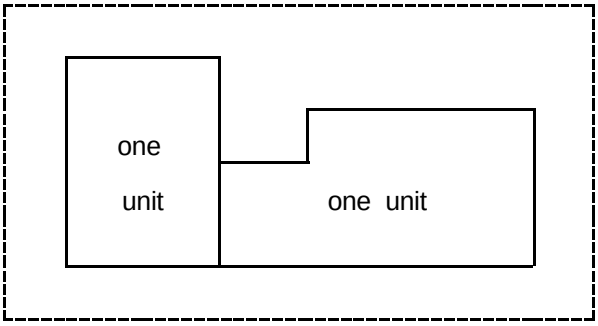


Figure 1.6-4 - Nonresidential Attached

b. **Residential** - Group of building types comprising the following:

1. Single Detached - One dwelling unit, freestanding and structurally separated from other dwelling units or buildings, located on a lot or development site. Includes Manufactured Dwellings.

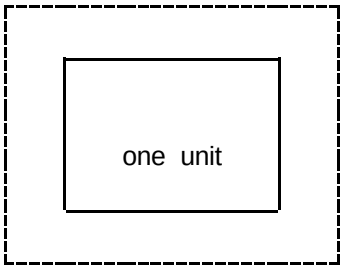


Figure 1.6-5 - Residential Single Detached

2. Single Detached (Zero Lot Line) - One dwelling unit, freestanding and structurally separated from other buildings, with no setback from one lot line.

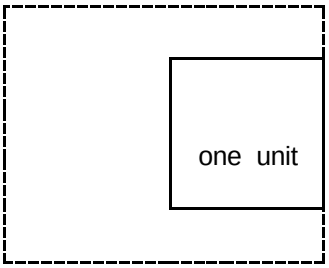


Figure 1.6-6 - Residential Single Detached (Zero Lot Line)

3. Duplex - Two dwelling units on a single lot placed side by side so that some building walls are in common for a minimum length of five ft. Fences, trellises, etc. attached between buildings do not create Attached units. Stacked duplex units (where one unit is on top of another) are acceptable.

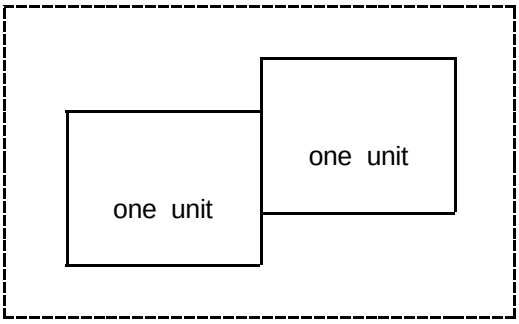


Figure 1.6-7 - Residential Duplex

4. Single Attached (Zero Lot Line) - Two dwelling units on separate lots, but placed side by side so that some building walls are in common for a minimum length of five ft. at a common property line. Fences, trellises, etc. attached between buildings do not create Attached structures.

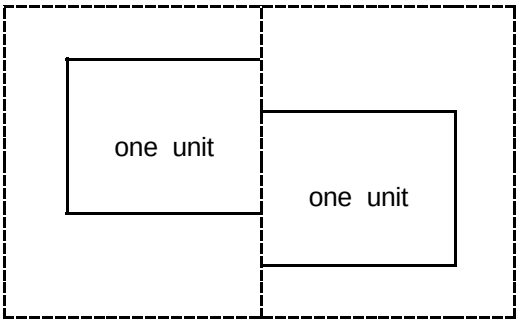


Figure 1.6-8 - Residential Single Attached (Zero Lot Line)

5. Attached - Three or more dwelling units on separate lots, but placed side by side so that some building walls are in common for a minimum length of five ft. at a common property line. Fences, trellises, etc. attached between buildings do not create Attached structures.

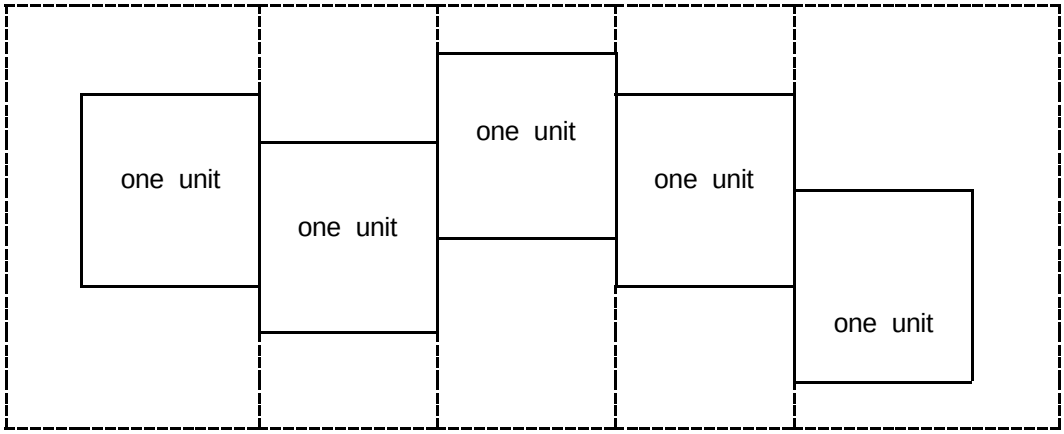


Figure 1.6-9 - Residential Attached

6. Multi-dwelling - Three or more dwelling units in any vertical or horizontal arrangement, located on one lot or development site, and where some building walls are in common for a minimum length of five ft. Fences, trellises, etc. attached between buildings do not create Attached units.

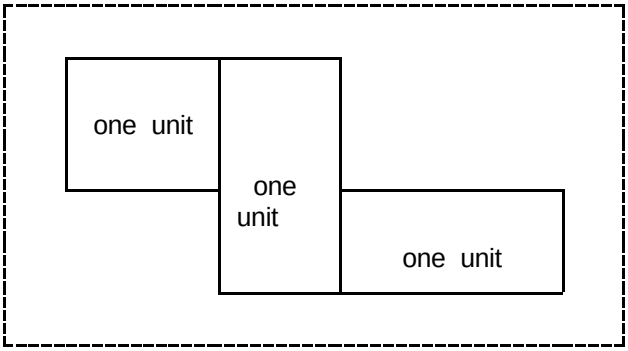


Figure 1.6-10 - Residential Multi-dwelling

7. Manufactured Dwelling Facility - Facility where four or more manufactured or mobile homes are within 500 ft. of one another on a lot, tract, or parcel of land under the same ownership. The primary purpose of the facility is to rent spaces for manufactured or mobile homes. The applicable Oregon Revised Statutes that pertain to Manufactured Dwellings and facilities are ORS 446.155 through ORS 446.285, and ORS 455.010. The Oregon Administrative Rule pertaining to Manufactured Dwellings is OAR Chapter 918, Division 500-520. The State of Oregon Manufactured Dwelling and Park Specialty Code, which is a min/max code, governs construction requirements for manufactured and mobile homes.

8. Accessory Dwelling Unit - One dwelling unit, either detached or structurally attached, located on the same lot as at least one other dwelling unit. Provisions for Accessory Dwelling Units require that the owner of the lot occupy either the main residence or

the Accessory Dwelling Unit. See Section 4.9.40 of Chapter 4.9 - Additional Provisions for additional development standards.

c. The following terms are **not** considered Building Types for purposes of this Code, but some are considered Housing Types for the purposes of meeting Code requirements for Housing Type variations. See Housing Types.

1. Cluster - Dwelling units arranged to retain open space areas equal to or greater than the cumulative total open space areas normally required under the applicable zone; the permitted gross density of a site is maintained.

2. Condominium - Form of ownership where the owner has a deed to a volume of space; governed by the provisions of ORS Chapter 100, as amended.

3. Townhouse - Three or more Attached dwelling units, each on a separate lot, often with two stories and with ground floor access.

4. Rowhouse - Three or more Attached dwelling units, each on a separate lot.

5. Triplex, Fourplex, Fiveplex, Sixplex, etc. - Multi-dwelling with three or more Attached dwelling units on the same lot.

6. Apartment House - Multi-dwelling building or portion thereof designed, built, rented, leased, let, or hired out to be occupied; or the residence of three or more families living independently of one another.

Carport - Roofed structure or a portion of a building open on two or more sides; used primarily for parking of motor vehicles.

Catchment - Watersheds that are defined by the lowest points of elevation in a site. The Catchment includes all watersheds defined by streams exiting the site and by streams draining to the interior of the site.

Cemetery - Land used or intended to be used for burial of the dead and related Cemetery activities, including columbarium, crematoriums, mausoleums, and mortuaries, when operated in conjunction with and within the boundary of the Cemetery.

Certified Local Government (CLG) - City or county that has been certified by the National Park Service, U.S. Department of the Interior, to carry out the purposes of the National Historic Preservation Act of 1966, as amended. The CLG program is administered by the State Historic Preservation Office (SHPO). The City of Corvallis is a Certified Local Government.

Church - Permanently located, fully enclosed building used primarily for religious worship.

City - City of Corvallis, a municipal corporation of the State of Oregon, involved in activities in either its governmental or its corporate capacity; otherwise, that officer, department, or agency of the City

indicated by the context; or City Manager where the context does not clearly indicate a specific officer, department, or agency.

City Limits - Boundary line that identifies land within the City.

Compatible - Ability of different uses to exist in harmony with each other. "Making uses compatible with each other" implies site development standards that regulate the impact of one use on another.

Comprehensive Neighborhood - Primarily residential area that offers a range of uses to provide for the daily needs and activities of residents within easy walking distance of residences. Comprehensive Neighborhoods contain a variety of housing opportunities, at overall densities that can support appropriately scaled commercial development and viable public transportation. The core of a Comprehensive Neighborhood contains a Major Neighborhood Center that serves community-wide shopping and office needs. The design of a Comprehensive Neighborhood fosters a sense of community with safe, vital public areas, while working to ensure compatibility and effective transitions between diverse uses.

Comprehensive Plan Amendment - Amendment to either the boundaries of Comprehensive Plan Map designations shown on the Official Comprehensive Plan Map or an amendment to the text of the Comprehensive Plan. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.1 - Comprehensive Plan Amendment Procedures.

Conceptual Development Plan - Land use process that is a type of Conditional Development and that provides a mechanism for achieving greater flexibility and improved design where the scope of the proposed modifications to this Code's pre-stated standards exceeds that permitted through Chapter 2.12 - Lot Development Option. This type of land development project is comprehensively planned as an entity via a unified site plan. Often it is proposed to allow for better preservation of Significant Natural Features and/or for innovation in site planning and architectural design. Approval requires compensating benefits that off-set the requested development standard modifications. The request must be followed by or processed concurrently with a Detailed Development Plan and the issuance of Building Permits is withheld until a Detailed Development Plan is approved. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 2.5 - Planned Development, and Section 2.5.40 - Conceptual Development Plan Review Procedures.

Conditional Development - Land use process that provides an opportunity to allow a use when potential adverse effects can be mitigated or deny a use if concerns cannot be resolved to the satisfaction of the hearing authority. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.3 - Conditional Development.

Conditional Development Modification - Land use process that provides an opportunity to allow a limited amount of flexibility with regard to site planning and architectural design for a previously approved Conditional Development and provides benefits within the development site that compensate for requested variations from approved Conditional Development such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in

Section 1.2.110.02 - General Development and Section 2.3.40 - Conditional Development Modification.

Conditions of Approval - Requirements placed on a development for a number of purposes, which include but are not limited to:

a. Ensuring adherence to the proposal that is approved;

b. Ensuring that adequate public and private services and facilities are provided, consistent with adopted transportation and facility plans and applicable regulations;

c. Ensuring that Natural Resources and Natural Hazards issues are addressed consistent with the applicable criteria and regulations;

d. Bringing the development into compliance with applicable criteria and regulations, including but not limited to Comprehensive Plan Policies and/or this Code's standards;

e. Helping to assure that negative impacts of a development are mitigated up front, particularly in the case of Conditional Development approvals; and

f. Assisting applicants by identifying some of the requirements that will affect subsequent related application requests such as Final Plats, Building Permits, construction permits, Public Improvement by Private Contract (PIPC) Permits, etc.

Conservation Easement - Nonpossessory interest of a holder in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic, or open space values of real property; ensuring its availability for agricultural, forest, recreational, or open space use; protecting Natural Resources or Natural Hazards; maintaining or enhancing air or water quality; or preserving the historical, architectural, archaeological, or cultural aspects of real property. Also defined in ORS 215.715, as ameded.

Consolidation - Elimination of property line(s) of unplatted land to create a single unit of land.

Contiguous - Same as Adjacent. Properties separated by a street may also be considered contiguous.

Contractor Sidewalk/Street Stamps - Insignia or mark stamped into a sidewalk or street that includes information, such as the contractor's name and the date the work was performed, and which indicates that the stamp dates from 1956 or before.

Cornice - Any molded projection which crowns or finishes the part to which it is affixed. Also, the exterior trim of a structure at the meeting of the roof and wall;

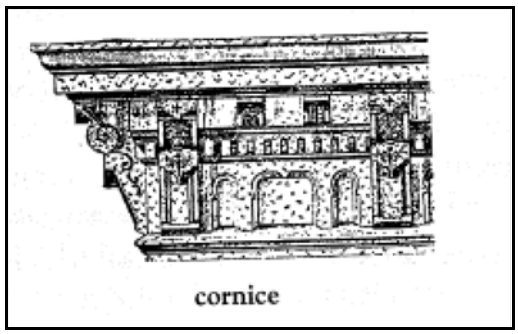


Figure 1.6-11 - Cornice

usually consists of bed molding, soffit, fascia, or crown molding.[2] See Figure 1.6-11 - Cornice

Corvallis Register of Historic Landmarks and Districts (Local Register) - City's official list of Locally-designated Historic Resources.

Corvallis Streams – All streams that are located either in part or entirely within the City's Urban Growth Boundary.

Critical Facility - See "Critical Facility" in Section 1.6.40. *[ORS 455.447 & Model Ordinance Section II - Definitions]*

Cupola - Small dome or tower-like structure on a roof.

Datum - The vertical datum is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NAVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88). *[Model Ordinance Section II - Definitions]*

Day(s) - Calendar days unless working days are specified.

Day Care, Commercial Facility - Institution, establishment, or place that commonly receives at one time more than 12 persons for a period not to exceed 12 hours per day. The facility provides the persons with board, care, or training apart from their parents or guardians for compensation or reward in accordance with ORS 657A.250-440, as amended. Refer to Section 4.9.70 of Chapter 4.9 - Additional Provisions for additional development standards (area per child and buffering).

Day Care, Family - Babysitting, care of 12 or fewer children, including resident family members, as accessory to any residential use. Family day care is not subject to the definition of Home Business.

Density - Number of dwelling units per acre of land, calculated in accordance with the definition for Density Calculation.

Density Calculation - Density is calculated as either gross density or net density. The minimum density for a site is net density and the maximum density is gross density.

a. **Density, Gross** - Number of dwelling units per gross area, in acres. See definition for Area, Gross. Additionally, in calculating gross density for a Minor Land Partition site, applicants may include in their calculation 50 percent of the area of any street rights-of-way that front the subject site, for the distance the streets front the subject site.

b. **Density, Net** - Number of dwelling units per net area, in acres. See definition for Area, Net.

c. **Fractions** - When the sum of the dwelling units is a fraction of a dwelling unit, and the fraction is equal to or greater than 0.5, an additional dwelling unit shall be required

[2] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

(minimum density) or allowed (maximum density). If the fraction is less than 0.5, an additional dwelling unit shall not be required or allowed.

Density Transfer - Permits residential density under a single development application to be shifted from one part of a development site and added to another part of the same site. It can be used to protect Significant Natural Features that are on the development site without losing overall density in the development. Density transfer does not permit an increase in the gross density for the entire development site.

Dentil - See Figure 1.6-12 - Dentils. One of a band of small, square, tooth-like blocks forming part of the characteristic ornamentation of the Iconic, Corinthian, and Composite orders, and sometimes Doric.[3]

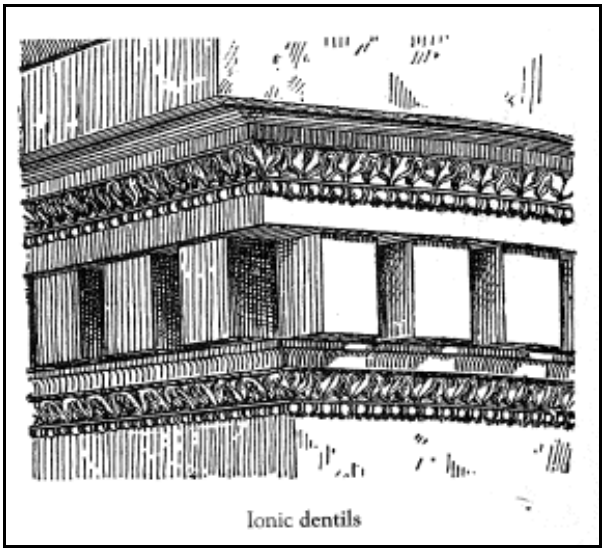


Figure 1.6-12 - Dentils

Dentil Band - See Figure 1.6-12 - Dentils

a. Molding that occupies the position of a row of Dentils in classical architecture.

b. Course of masonry that resembles a row of Dentils; for example, in brickwork, the tooth-like effect produced by the projection of alternate headers and smaller blocks.[3]

Designated Historic Resource - Historic resource that has been determined through an official action to meet criteria for Historic Significance, resulting in the resource being Locally-designated and/or Nationally-designated, as more specifically defined below. Chapter 2.9 - Historic Preservation Provisions applies to all Designated Historic Resources, regardless of whether they are Locally- or Nationally-designated. Some Designated Historic Resources are listed in both the Local Register and the National Register of Historic Places.

a. **Locally-designated** - Locally-designated Historic Resource is listed in the Corvallis Register of Historic Landmarks and Districts (Local Register). To list a property in the Local Register, a property owner must obtain approval for a Zone Change to apply a Historic Preservation Overlay to the subject property. A Historic Preservation Overlay denotes the Locally-designated Historic Resource on the City's Zoning Map. Property owner approval for local designation is required.

b. **Nationally-designated** - Nationally-designated Historic Resource is listed in the National Register of Historic Places. To list a property in the National Register of Historic Places, approval must be obtained in accordance with state and federal processes and criteria listed in 36 CFR 60. Local level input regarding a proposed National Register of Historic Places nomination normally is solicited; however, official local action does not occur. Because Nationally-designated Historic Resources are subject to the Historic Preservation Provisions

[3] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

of Chapter 2.9, a notation indicating that a property is listed in the National Register of Historic Places is included on the City's Zoning Map.

DSL - Oregon Department of State Lands.

Detailed Development Plan - Land use process that is a type of Conditional Development and that provides a mechanism for achieving greater flexibility and improved design where the scope of the proposed modifications to this Code's pre-stated standards exceeds that permitted through Chapter 2.12 - Lot Development Option. This type of land development project is comprehensively planned as an entity via a unified site plan and must be based on a previously or concurrently approved Conceptual Development Plan. Such Plans are often proposed to allow for better preservation of Significant Natural Features and/or for innovation in site planning and architectural design. Approval requires compensating benefits that off-set the requested modifications to development standards. A Detailed Development Plan provides sufficient information for the issuance of building permits. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 2.5 - Planned Development, and Section 2.5.50 - Detailed Development Plan Review Procedures.

Detention Basin - Constructed pond and/or underground facility that is designed to temporarily collect runoff from a development to maintain the runoff rate to a specified pre-development flow.

Developer - Any person, including a governmental agency, undertaking development.

Development - Making a material change in the use or appearance of a structure or land, dividing land into two or more parcels, changing the land use designation, or creating or terminating a right of access. Where appropriate to the context, development refers to the act of developing or the result of development. For the definition of Development as applied to the 100-year Floodplain regulations contained in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, please see Section 1.6.40, below. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Development Constraints - Conditions that limit or preclude development of an area or site such as location within: a Natural Hazard on the Natural Hazards Map; a Riparian Corridor or Wetlands on the Riparian Corridors and Wetlands Map; an area of Significant Vegetation on the Significant Vegetation Map; a 4th-level water service area (not served by City water); and/or an area that is permanently preserved via a conservation easement or a drainageway easement/dedication.

Development Constraints -- Development Constraints that no longer preclude development due to the application of the Minimum Assured Development Area (MADA) provisions. A formerly constrained area is one which would be protected through the Development Constraints in Chapters 4.5, 4.11, 4.12, ~~or~~ 4.13, or 4.14, but can be developed by applying the MADA provisions in Chapter 4.11. Development can occur on the site and the constraining factors such as significant vegetation, etc. may be removed or reduced to accommodate the development. However, for MADA development in Floodway Fringe Areas, there are default standards required and they are the Partial Protection Floodplain Provisions. See Section 4.5.20.03 and **Formerly Constrained Areas**.

Development, Intensity of - Relative measure of development impact as defined by characteristics such as the number of dwelling units per acre, amount of traffic generated, and amount of site coverage.

Development-related Concerns - Issues that are worthy of special attention for the developer or for permitting agencies. These issues are identified on the Notice of Disposition for a development approval and are generally raised during the development review process.

Development Site - Legally established lots, parcels, or tracts of land involved in a land use application or building/construction permit application. Sites that are occupied or capable of being occupied by a building or group of buildings including accessory structures and accessory uses, together with yards or open spaces, setback areas, and access as required by this Code.

Digital Flood Insurance Rate Map - See "Digital Flood Insurance Rate Map" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Director - Community Development Director of the City of Corvallis, or the Director's official designee, with responsibility for administration of this Code.

Director's Interpretation - Land use process that seeks the Director's interpretation of either this Code or Comprehensive Plan provisions. These Interpretations may be legislative or quasi-judicial in nature. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.16 - Request for Interpretation.

Discontinued Use - Use that has ceased to be active. Shall not require a determination of the voluntary or involuntary nature of the discontinuance or intent to resume the use. Rental payments or lease payments and taxes are not considered a continued use.

Dominant Cover Type - One or more vegetative species that provide a minimum of 20 percent area cover within the corresponding vegetative layer.

Downtown Parking Assessment District - Portion of the downtown in which property owners contributed to the construction of parking facilities. Within the area shown below in Figure 1.6-13 - Downtown Parking Assessment District, new development has no required new parking to be constructed.

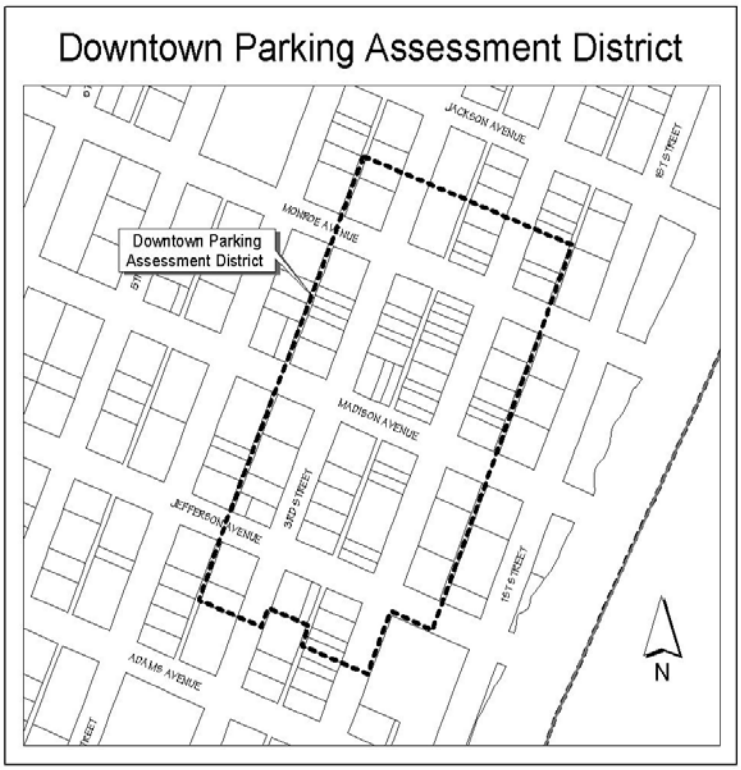


Figure 1.6-13 - Downtown Parking Assessment District

Downtown Pedestrian Core Area - As indicated below in Figure 1.6-14 - Downtown Pedestrian Core Area, an area bound by the Willamette River on the east, Fifth Street on the west, Jackson Avenue on the north (excluding the Benton County Courthouse),and Jefferson Avenue on the south (including Adams Avenue between Second and Third Streets).

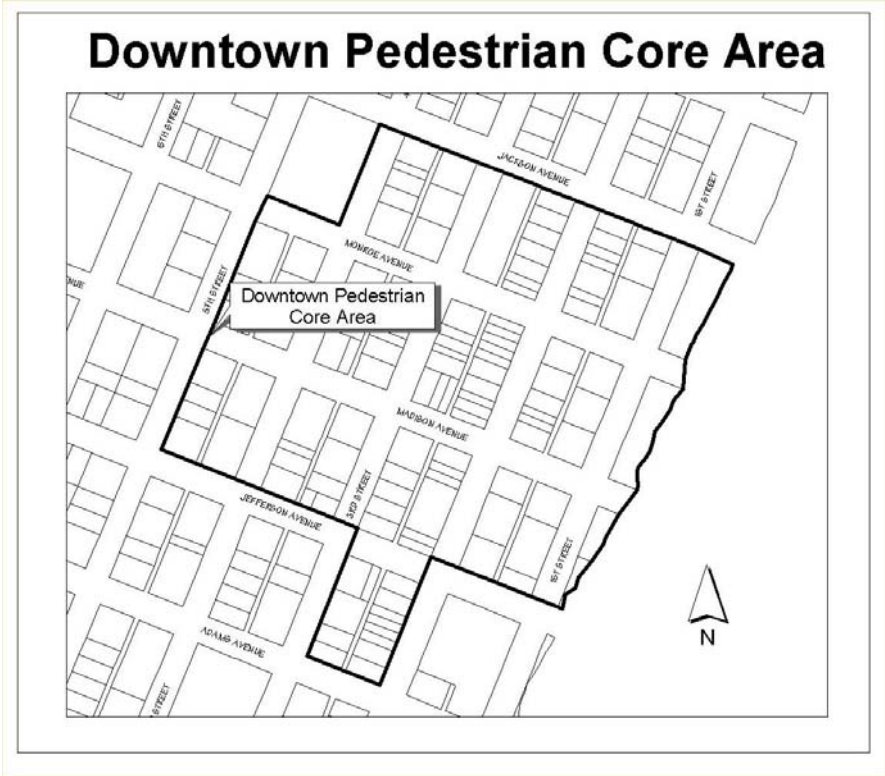


Figure 1.6-14 - Downtown Pedestrian Core Area

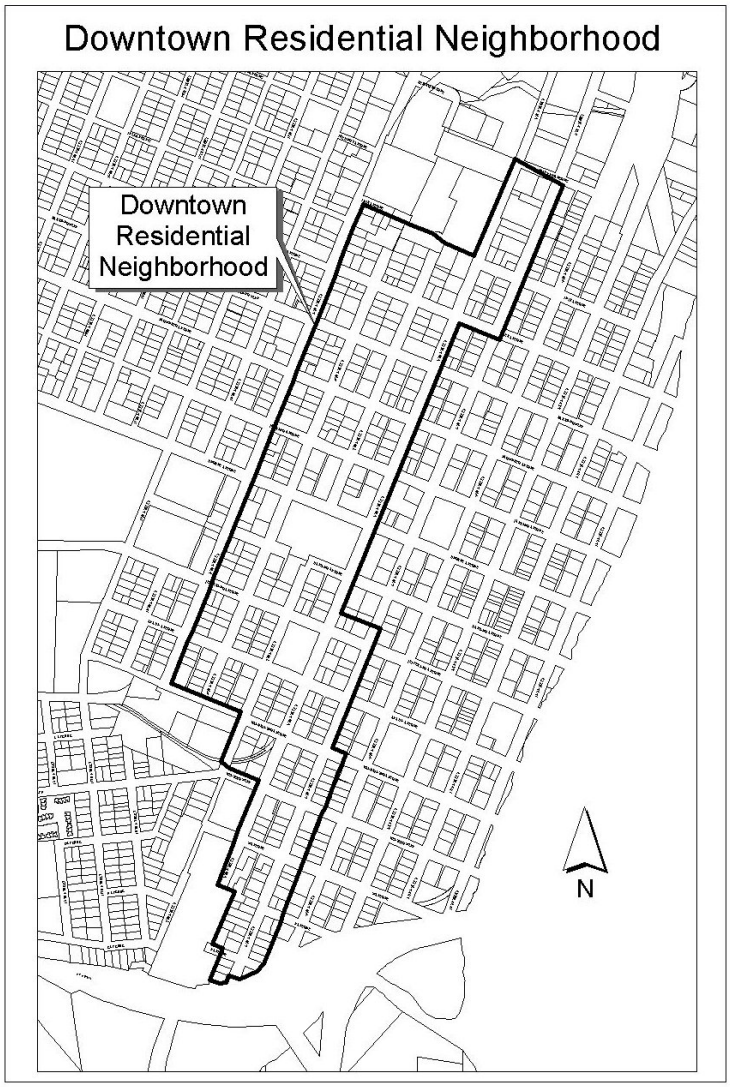


Figure 1.6-15 - Downtown Residential Neighborhood

Downtown Residential Neighborhood - Area generally bound by Sixth Street on the east, Ninth Street on the west, Fillmore Avenue on the north, and Mary's River on the south. This area is intended to provide housing in close proximity to the Central Business Zone and is identified below in Figure 1.6-15 - Downtown Residential Neighborhood.

Drainageway - Natural or artificial Watercourse, including adjacent Riparian Vegetation, that transmits natural Stream or stormwater runoff from a higher elevation to a lower elevation.

Drainageway Dedication - Transfer, in fee-simple, of ownership of a given piece of property for the purpose of stormwater functions.

Drive-Through Facilities - Facilities that provide services directly to patrons in motor vehicles. These types of facilities typically rely on a long driveway or lane that provides adequate room for vehicle stacking at a drive-up service window.

Dwelling Unit - One or more rooms, with bathroom and kitchen facilities (limited to one kitchen only), designed for occupancy by one family. See Family.

Easement - Right that a person has to use another's land for a specific purpose, such as for access or for utilities.

Ecological Restoration - Restoration is the process of repairing damage to the diversity and dynamics of ecosystems. Ecological Restoration is the process of returning an ecosystem as closely as possible to pre-disturbance conditions and functions.

Economically Feasible Rehabilitation - Relative to Designated Historic Resources, rehabilitation is economically feasible where the cost required to bring the structure up to minimum Building Code standards while maintaining its Historic Integrity does not exceed 75 percent of the structure's replacement value at a similar quality of construction. Calculations required in this definition shall be developed as follows:

a. Estimates for the cost of bringing a structure up to minimum Building Code standards shall be limited to the costs associated with improving a structure to meet minimum Building Code standards - without regard to costs associated with other desired improvements;

b. With respect to estimates for the cost of bringing a structure up to minimum Building Code standards, three estimates from contractors licensed in the State of Oregon shall be provided; and

c. Replacement Value as used in this definition shall equal the Benton County Assessor's Office figures for Replacement Value.

Effects of Buoyancy - Uplift force of water on a submerged or partially submerged object.

Elevated Building - See "Elevated Building" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Endangered Species - Any species that is in danger of extinction throughout all or a significant portion of its range.

Endangered Species Act (ESA) - Federal regulatory program to protect fish, wildlife, and plants from extinction. It provides a means whereby the ecosystems upon which threatened and endangered species depend may be conserved to ensure the continued survival of the species.

Enhance - To augment into a more desirable condition. In the context of natural features regulations, to improve the functions and values of an existing Natural Resource.

Erosion - Movement or displacement of soil resulting from natural and human-induced processes including weathering, dissolution, abrasion, corrosion, and transportation.

Excavation - Process of mechanically altering the natural grade by stripping or cutting and/or filling the earth. See Grading.

Existing Building or Structure - See "Existing Building or Structure" in Section 1.6.40. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*

Extension of Services - Land use process that implements City Charter Section 51 and allows an extension of City sanitary sewer, storm sewer, and/or water services outside the City limits in limited circumstances. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.7 - Extension of City Services Outside the City Limits.

Family - Individual or two or more persons related by blood, adoption, or marriage, or a group of not more than five adults unrelated by blood or marriage, living together in a dwelling unit. As used in this Code, Family also refers to not more than five unrelated physically or mentally handicapped, elderly, or drug- or alcohol-dependent persons receiving treatment, and any number of resident staff persons engaged in their care. The relevant Oregon Revised Statutes that pertain to this definition include ORS 197.660(2) and ORS 197.665, as amended.

Family Day Care - See Day Care, Family.

FAR - See Floor Area Ratio.

Federal Emergency Management Agency (FEMA) - See "Federal Emergency Management Agency (FEMA)" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Final Plat - Final recorded version of a Subdivision plat, Replat, or Partition plat.

Final Plat, Partition - Final recorded map, diagram, drawing, replat, or other writing containing all the descriptions, locations, specifications, provisions, easements, dedications, and information concerning a partition.

Final Plat, Subdivision - Final recorded map, diagram, drawing, replat, or other writing containing all the descriptions, locations, specifications, provisions, easements, dedications, and information concerning a Subdivision.

Fire Fuel Break Safety Area - Area maintained or constructed, through the reduction of combustible vegetation and other fire fuel materials around structures, to prevent the spread of fires, and the resulting damage to life and property, and/or the area provided for safer fire suppression operations.

Fish-bearing Streams - Fish-bearing streams are those indicated on maps developed by the Oregon Department of Fish and Wildlife and the Oregon Department of Forestry or those where fish presence is documented by the Natural Features Inventory or a recognized fish biologist.

Fish Habitat - Areas upon which fish depend in order to meet their requirements for spawning, rearing, food supply, and migration.

Flag Lot - Lot not meeting the minimum street frontage requirements and that gains access to the nearest public or private street (private street must be within a separate tract) by means of a narrow strip of land.

Flood or flooding - See "Flood or flooding" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Flood Insurance Rate Map (FIRM) - ~~Official map on which the Federal Insurance Administration has delineated areas of special flood hazards and the risk premium zones applicable to portions of the community.~~See "Flood Insurance Rate Map (FIRM)" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Flood Insurance Study (FIS) - See "Flood Insurance Study" in Section 1.6.40. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*

Flood, 100-year - ~~Flood with a one percent chance of occurring in any given year. This is the flood most commonly used for regulatory purposes and is called the Base Flood. As shown below in Figure 1.6-16 - Floodplain Cross Section, this flood event inundates the entire 100-year Floodplain.~~

~~See Base Flood.~~ See "Flood, 100-year" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*

Floodplain - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.~~ See "Floodplain" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*

Floodplain Development Permit - See "Floodplain Development Permit" in Section 1.6.40. *[44 CFR 60.3(a) & Model Ordinance Section III-D]*

Floodplain Functions - ~~Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.~~ See "Floodplain Functions" in Section 1.6.40. *[Current Code, just moved]*

Floodplain, 100-year - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. See Base Flood and 100-year Flood.~~ See "Floodplain, 100-year" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*

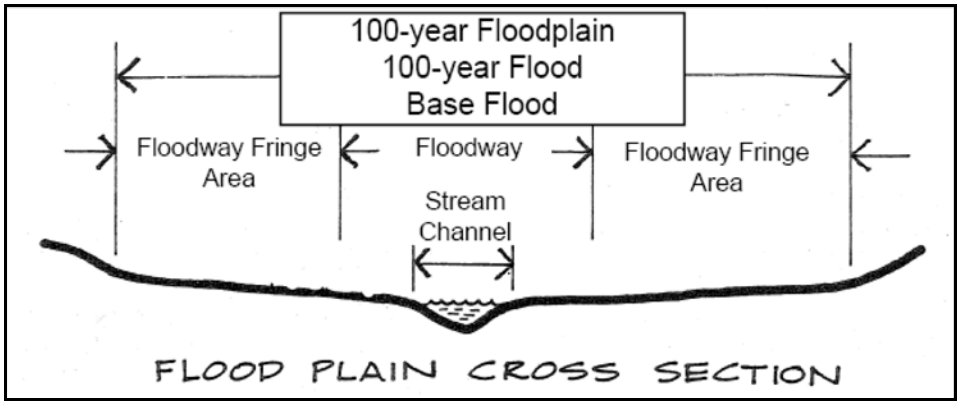


Figure 1.6-16 - Floodplain Cross Section

Floodway (Regulatory Floodway) - See "Floodway (Regulatory Floodway)" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Floodway, 0.2-ft. - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than~~

~~0.2 ft.~~See "Floodway (Regulatory Floodway)" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Floodway, 1.0-ft. - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than 1.0 ft.~~See "Floodway (Regulatory Floodway)" in Section 1.6.40.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Floodway Fringe - ~~As shown in Figure 1.6-16 - Floodplain Cross Section, the area of the 100-year Floodplain lying outside of the Floodway. Context is the 0.2-ft. Floodway, unless specifically identified as the 1.0-ft. Floodway. See Floodway, 0.2-ft. and Floodway, 1.0-ft.~~See "Floodway Fringe" in Section 1.6.40. *[Current Code, just moved]*

Floor Area Ratio (FAR) - Gross floor area of all buildings on a lot or development site divided by the net area of a lot or development site on which the buildings are located. See Area, Net. In cases where outdoor areas are directly related to the subject land use(s) (e.g., outdoor storage areas; planting areas for nurseries, tree farms, and agricultural businesses; portions of parking lots used for storage and circulation of moving vans associated with moving businesses; etc.), these outdoor areas may be included in the Floor Area Ratio square footage calculation. However, unless specified otherwise, in no case shall standard parking and circulation areas, landscaping, etc., be included in the Floor Area Ratio square footage calculation.

Flow-through Design - ~~Typically a structure that does not hinder or obstruct the movement of or displace surface floodwater.~~ See "Flow-through Design" in Section 1.6.40. *[Current Code, just moved]*

Formerly Constrained Areas - Areas that contain areas that would be protected through the Development Constraints in Chapters 4.5, 4.11, 4.12, ~~or~~ 4.13, or 4.14, but can be developed by applying the MADA provisions in Chapter 4.11. Formerly Constrained Areas can be developed, and the constraining factors such as significant vegetation may be removed or reduced to accommodate the development. However, for MADA development in Floodway Fringe Areas, there are default standards required and they are the Partial Protection Floodplain Provisions. See Section 4.5.20.03 and **Development Constraints - Former**.

Frontage - Portion of a development site that abuts a public or private street.

Full-line Department Store - Store that provides a depth and variety of general merchandise, apparel, furniture, appliances, and home furnishings.

General Development Decision - Development decision that requires some discretion in applying the criteria and standards of this Code. Requires review and approval by staff without a public hearing; public notice prior to the staff decision; and the mailing of a Notice of Disposition to persons who responded in writing to the public notice. Appeals are made in accordance with Chapter 2.19 - Appeals.

Geographic Information System (GIS) - System of hardware, software, and data storage that allows for the analysis and display of information that has been geographically referenced.

Grade - (1) Average elevation of the land; (2) the percent of rise or descent of a sloping surface. Usually described as Finished Grade or Natural Grade, and measured in feet above sea level. There is a distinction between percent of slope and degree of slope. For example, a forty-five degree slope is a 100 percent grade. See also Slope.

Grade, Finished - As shown in Figure 1.6-17 - Cut and Fill Cross Section, final elevation of the ground level after development.

Grade, Natural - As shown in Figure 1.6-17 - Cut and Fill Cross Section, elevation of the ground level in its natural state, before construction, filling, or excavation.

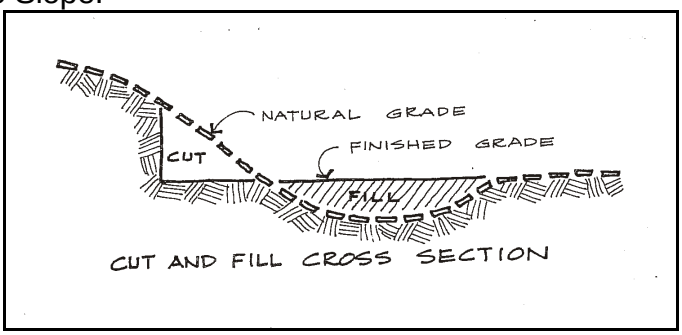


Figure 1.6-17 - Cut and Fill Cross Section

Grading - Stripping, cutting, filling, or stockpiling of earth or land, including the land in its cut or filled condition, to create new grades.

Green Area - Includes a site's landscaping, private preservation areas, and/or pedestrian amenities such as sidewalks, plazas, multi-use paths, unenclosed patios, and decks. Does not include areas covered by buildings, covered structures enclosed on one or more sides, parking areas, or vehicle circulation areas.

Habitable Floor - Floor usable for living purposes, which includes working, sleeping, eating, cooking, or recreation, or a combination of these.

Health Hazard Annexation - Land use process that addresses health hazard situations and evaluates whether a property meets the criteria for incorporation into the City limits. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.6 - Annexations.

Hearing Authority - City Council or an agency or officer of the Council designated by this Code to conduct public hearings regarding applications for development.

Height of Buildings - Vertical distance above a reference datum measured to the highest point of any non-gabled roof, or to the average height of the highest gable of a pitched or hipped roof. The height of a stepped or terraced building is the maximum height of any segment of the building. The reference datum shall be selected by either of the following, whichever yields a greater height of building:

a. As shown in Figure 1.6-18 - Method 1 below, elevation of the highest adjoining sidewalk or ground surface within a five-ft. horizontal distance of the exterior wall of the building when such sidewalk or ground surface is not more than 10 ft. above lowest grade.

b. As shown in Figure 1.6-19 - Method 2 below, elevation 10 ft. higher than the lowest grade when the sidewalk or ground surface described in "a", is more than 10 ft. above lowest grade.

The height of a stepped or terraced building is the maximum height of any segment of the building.

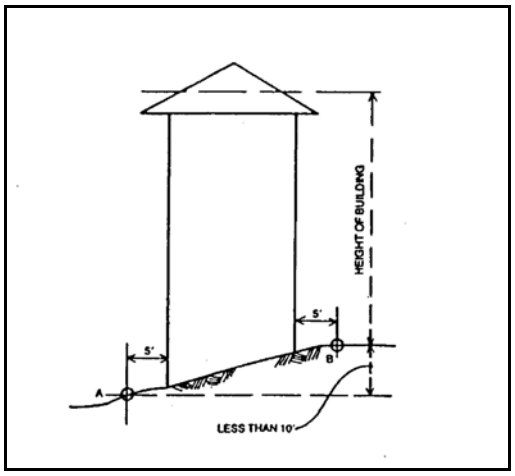


Figure 1.6-18 - Method 1

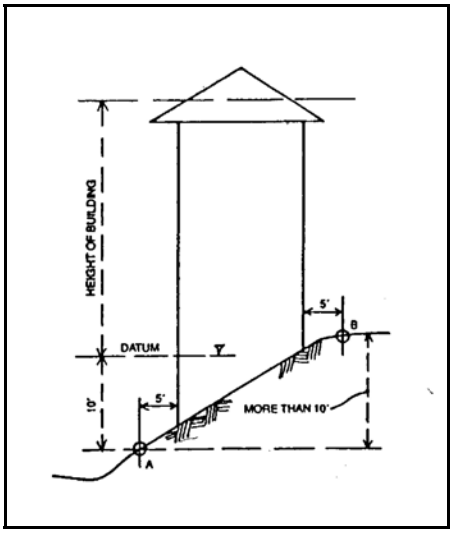


Figure 1.6-19 - Method 2

Highest Adjacent Grade - See "Highest Adjacent Grade" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Historic Integrity - Integrity of setting, location, materials or workmanship which is determined to be historic by fulfilling at least two of the following criteria:

a. The historic resource is in its original location or is in the location in which it made a historical contribution;

b. The historic resource remains essentially as originally constructed;

c. Sufficient original workmanship and material remain to show the construction technique and stylistic character of a given Period of Significance;

d. The immediate setting of the historic resource retains land uses, or landscaping and relationship with associated structures, consistent with the Period of Significance;

e. The historic resource contributes to the architectural continuity of the street or neighborhood;

f. The site is likely to contain artifacts related to prehistory or early history of the community; or

g. The historic resource is now one of few remaining prime examples of an architectural style or design, or a type of construction that was once common.

Historic Preservation Permit (HRC-level) - Land use process for review of changes to Designated Historic Resources. The changes address Alteration or New Construction, Demolition, and Moving activities not covered by Director-level Historic Preservation Permits, and not covered in Section 2.9.70 - Exemptions from Historic Preservation Permit Requirements. Specific

procedures and discretionary review criteria for this type of permit are listed in Sections 2.9.60.c, 2.9.90, 2.9.100, 2.9.110, and 2.9.120. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.9 - Historic Preservation Provisions.

Historic Preservation Permit (Director-level) - Land use process for review of changes to Designated Historic Resources. The changes address Alteration or New Construction activities that are minor in nature, not covered in Section 2.9.70 - Exemptions from Historic Preservation Permit Requirements, and decided upon by the Director. Specific procedures and clear and objective review criteria for this type of permit are listed in sections 2.9.60.c, 2.9.90, and 2.9.100. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.9 - Historic Preservation Provisions.

Historic Resource - Building, district, object, site, or structure that has a relationship to events or conditions of the human past, as defined in OAR 660-023-0200(1)(c) and 40 CFR 60.3.

Historic Significance (or Historically Significant) - Determination made for a resource that is in and of itself significant or that contributes to historic and cultural resources of the community. Such a determination is made when the resource is 50 years old or older and when at least one of the additional criteria listed below applies to it. Resources that are less than 50 years old may be considered eligible for historic designation if they are of exceptional importance, based on National Register of Historic Places Criteria for Evaluation (36 CFR 60).

a. It is associated with events that have made a significant contribution to the broad patterns of political, economic, cultural, or industrial history of the City, county, state or nation;

b. The resource is fundamentally related to the work, achievements, or life story of a person, group, organization, or institution that has made a significant contribution to the City, county, state or nation;

c. It embodies distinctive characteristics of a type, Period of Significance, or method of construction;

d. It may be a prime example of an architectural style or design, or may represent a type of construction that was once common and is now one of few remaining examples;

e. It represents the work of a master, i.e., it is a noteworthy example of the work of a craftsman, builder, architect, or engineer significant in City, County, State, or national history;

f. It demonstrates high artistic values in its workmanship or materials;

g. It yields or is likely to yield information important in prehistory or history;

h. It is a visual landmark; or

i. It contributes to the continuity or the historic character of the street, neighborhood, and/or community, or contributes to the Historic Integrity of the Period of Significance represented.

Historically Significant Tree - Historically Significant Tree is defined as a tree that meets the criteria described in “a," “b," or “c," below:

a. A tree that meets all of the following criteria:

1. The tree is located on a Designated Historic Resource property, is at least 50 years old, and has been in existence since a time prior to, or during, the Designated Historic Resource’s Period of Significance;

2. The tree meets the definition of Significant Tree in this Chapter, with the exception that the minimum eight-inch caliper at four ft. above grade requirement does not apply to a tree which, due to its species type, is not anticipated to reach a minimum eight-in. caliper by a 50-year date of maturity; and

3. The tree is consistent with at least one of the statements in “a.3.a” below, in the opinion of the Director. The Director’s opinion shall be based on the items in “a.3.b," below:

   a) Statements -

      1) The tree can be correlated to a Historically Significant event that contributed to Corvallis’ history;
      2) The tree marks the site of a historic event; or
      3) The tree is fundamentally related to the work, achievements, or life story of a person or group, organization, or institution that has made a significant contribution to the City, County, State or nation.

   b) Information for Use by the Director-

      1) Documentation in Section 2.9.60.c and any additional documentation provided by the property owner; and
      2) Consideration of the criteria referenced in “a.3(a)(3),” above relative to the Designated Historic Resource’s Period of Significance.

b. A tree that is either:

1. Identified as a Designated Historic Resource on an individual basis; or

2. In or adjacent to a National Register of Historic Places Historic District, within a private street right-of-way or a public right-of-way, and which meets both criteria “a.1" and “a.2" above, relative to the District.

c. Individually identified as Historically Significant in an official historic inventory for a Designated Historic Resource or an approved National Register of Historic Places nomination;

Historic Structure - See Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Home Business - Lawful commercial activity commonly conducted within a dwelling by members of the family occupying the dwelling, with up to one additional employee not to exceed 40 hours per week. The residential character of the dwelling shall be maintained and the activity conducted in such a manner as not to give an outward appearance nor manifest any characteristic of a business in the ordinary meaning of the term. The activity also does not infringe upon the right of neighboring residents to enjoy the peaceful occupancy of their homes. Garage sales are considered to be home businesses. Bed and Breakfast businesses that rent up to two bedrooms within owner-occupied dwellings are also considered to be Home Businesses. To be considered a Home Business, the Use must comply with all of the following:

a. No display shall indicate from the exterior that the building is being used in whole or in part for any purpose other than a dwelling, except that signage consistent with Section 4.7.90.01 of Chapter 4.7 - Sign Regulations is allowed. Garage sales are exempt from this provision.

b. No outside storage of merchandise or materials. Garage sales are exempt from this provision.

c. The amount of commercial activity is less intensive than activities permitted in a commercial zone.

d. The use will not cause excessive or unusual traffic in the vicinity because of deliveries, pick-ups, parking, sales, or other activities.

e. Noise, smoke, or odors do not exceed those created by normal residential use.

f. Each garage sale is limited in duration to two consecutive days. No more than six garage sales in one calendar year may be conducted at a residence.

Home Occupation - See Home Business.

Homeowners' Association - Private, incorporated, nonprofit organization operating under recorded land agreements through which each lot owner of a Planned Development or other described land area is automatically subject to a charge for a proportionate share of the expenses for the organization's activities, such as maintaining a common property. Homeowners' associations are authorized by ORS Chapter 94, as amended, and are not City government organizations.

Household - Domestic establishment including a member or members of a family and/or others living under the same roof.

Housing Types - Residential Housing Types consisting of the following:

a. **Single Detached ≤ 1,200 sq. ft.** - Same as Building Type Single Detached, but containing a total footage less than or equal to 1,200 sq. ft.

b. **Single Detached 〉 1,200 sq. ft.** - Same as Building Type Single Detached, but containing a total footage greater than 1,200 sq. ft.

c. **Single Detached (Zero Lot Line) ≤ 1,200 sq. ft.** - Same as Building Type Single Detached (Zero Lot Line), but containing a total footage less than or equal to 1,200 sq. ft.

d. **Single Detached (Zero Lot Line) 〉 1,200 sq. ft.** - Same as Building Type Single Detached (Zero Lot Line), but containing a total footage greater than 1,200 sq. ft.

e. **Accessory Dwelling Unit** - Same as Building Type Accessory Dwelling Unit.

f. **Single Attached (Two units)** - Same as Building Type Single Attached (Zero Lot Line).

g. **Duplex** - Same as Building Type Duplex.

h. **Attached (Three - Five Units)** - Same as Building Type Attached, but containing three to five dwelling units. Can include such housing types as townhouses, rowhouses, flats, and condominiums.

i. **Attached (〉five units)** - Same as Building Type Attached, but containing greater than five dwelling units. Can include such housing types as townhouses, rowhouses, flats, and condominiums.

j. **Triplex** - Same as Building Type Multi-dwelling, but containing three dwelling units.

k. **Fourplex** - Same as Building Type Multi-dwelling, but containing four dwelling units.

l. **Apartment Buildings** - Same as Building Type Multi-dwelling, but containing greater than four dwelling units.

Human Occupancy - Consistent with the definition for Habitable Space (Room) from Section 209-H of the 1998 Oregon Structural Specialty Code. Refers to space in a structure for living, sleeping, eating, or cooking. Does not include bathrooms, toilet compartments, closets, halls, storage and utility spaces, and similar areas.

Human Scale - Synonym of pedestrian scale, Human Scale is an informal and relative standard. It suggests that the relationship between a person and the environment, whether natural or human-made, is comfortable, intimate, and contributes to the person's sense of accessibility. Additionally, Human Scale refers to the proportional relationship of a particular building, structure, or streetscape element to the human form and function.

Hydrodynamic Load - ~~Force of water in motion.~~ See "Hydrodynamic Load" in Section 1.6.40. *[Current Code - just moved]*

Hydrostatic Load - ~~Force of water at rest.~~ See "Hydrostatic Load" in Section 1.6.40. *[Current Code - just moved]*

Impact - Consequences of a course of action; the effect of a goal, guideline, plan, or decision.

Improvement Plan - Maps or drawings showing the layout of improvements to be installed as a condition of approval for development.

Infill - Developing vacant and partially vacant land within a built environment. To be considered infill, such land shall be less than 0.5 acres in size for residentially designated lands or less than 1.0 acre in size for lands designated otherwise.

In-kind Repair or Replacement - Repair or replacement of existing materials or features that match the old in design, color, texture, materials, dimensions, shape, and other visual qualities. This includes replacement of roofing, doors, windows, siding, and other structural elements, provided the replacements match the old in the manners described herein. Repair or replacement of windows or doors containing glass that substitute double-pane glass for single-pane glass is not considered to be In-kind Repair or Replacement. Additionally, while the repair or replacement of deteriorated materials In-kind is allowed, it is recommended that repair be considered by the property owner prior to replacement.

Intermittent Stream - See Stream, Intermittent.

Irrigation System - Manual or mechanically controlled method of supplying water to an area that needs it.

Jurisdictional Wetlands - See Wetlands, Jurisdictional.

Key Areas of Exchange - Locations within a watershed where ground water recharge from surface water occurs (e. g., permeable depressions) or where streams are fed by ground water (e.g., springs).

Kitchen - Any room used, intended, or designed for preparation of food and storage of food, including any room with a sink and either a 3/4-in. gas opening or provision for a range or stove.

Land Area, Net - See Area, Net.

Land Development Code Text Amendment - Amendment to the text of this Code. Procedures for this type of land use application are outlined in Section 1.2.80.

Land Division - Land divided to create legally separate areas in one of the following ways:

a. **Partition** - Division of land that creates three or fewer parcels within a calendar year when such parcels exist as a unit or contiguous units of land under single ownership at the beginning of the year. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments.

A Partition does not include division of land resulting from any of the following:

1. Establishment or modification of a tax lot by the County Assessor;

2. A lien foreclosure, foreclosure of a recorded contract for the sale of real property, or creation of cemetery lots;

3. An adjustment of a property line where an additional unit of land is not created and where the existing unit of land reduced in size by the adjustment complies with any applicable zone criteria established by this Code; or

4. Sale or grant by a person to a public agency or public body for state highway, county road, City street, or other right-of-way purposes provided that such road or right-of-way complies with the applicable Comprehensive Plan policies and ORS 215.213 (2)(q)-(s) and 215.283 (2)(p)-®, as amended. See Lot Line Adjustment.

b. **Subdivision** - Division of land that creates four or more lots within a calendar year when such lots exist as a unit or contiguous units of land under a single ownership at the beginning of such year. A Subdivision does not include division of land resulting from any of the activities in "a," above. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development, Section 1.2.110.03 - Special Development, and Chapter 2.4 - Subdivisions and Major Replats.

Land, Intensity of - Relative measure of development impact as defined by characteristics such as the number of dwelling units per acre, amount of traffic generated, and amount of site coverage.

Land, Parcel of - Unit of land with established boundaries or a unit of land created by a Partition. See Lot for a unit of land created by a Subdivision.

Large Wood (as found in streams) - In the analysis of the local streams of Corvallis that was done for the Endangered Species Act Salmon Listing Response Plan, Large Wood was identified as 10 centimeters (four inches) in diameter and three meters (10 feet) long.

Lateral Addition - See "Lateral Addition" in Section 1.6.40.*[Model Ordinance Section II - Definitions]*

Legal Nonconforming Development - Lawful existing structure or use that does not conform to current requirements of this Code, but which existed before this Code or any amendment to it became effective.

Legislative Decision - Formulation of policy characteristic of the actions by a city council. *Ex parte* contact requirements are not applicable to legislative hearings. In general, personal notice to citizens of proposed changes is not required, although this Code specifies that in some cases, notice shall be mailed to property owners if a decision will change the land use designation. In general, the burden of being informed rests on the citizen. See also Limited Land Use Decision and Quasi-judicial Decision.

Letter of Map Change (LOMC) - See "Letter of Map Change (LOMC) in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Limited Land Use Decision - Land use decision made by City staff through an administrative process and that qualifies as a Limited Land Use Decision under ORS 197.195, as amended. Limited land use decisions are among the types of decisions that are reviewed through the process set out in Chapter 1.2 - Legal Framework as General Developments.

Local Register - See Corvallis Register of Historic Landmarks and Districts.

Local Wetlands Inventory (LWI) - See Wetlands, Local Wetlands Inventory.

Locally Protected Locally Significant Wetlands (LPLSW) - See Wetlands, Locally Protected Locally Significant Wetlands (LPLSW) .

Locally Significant Wetlands - See Wetlands, Locally Significant (LSW).

Lot - Unit of land created by a Subdivision of land and intended as a unit for the purpose, whether immediate or future, of transfer of ownership and/or for development.

Lot Area - Total horizontal area within the lot lines of a lot.

Lot, Corner - Lot situated at the intersection of two streets, the interior angle of such intersection not exceeding 135 degrees.

Lot Coverage - Unless otherwise noted in a development zone, portion of a development site covered by building footprints, structures enclosed on one or more sides, parking areas, and vehicle circulation areas (including all gravel and paved surface areas).

Lot Depth - Distance from the midpoint of the front lot line to the midpoint of the rear lot line.

Lot Development Option - Land use process that applies only to individual lots and provides a means to vary the development standards normally applied in a particular zone. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.12 - Lot Development Option.

Lot, Interior - Lot with frontage on only one street.

Lot Line - Property line bounding a lot.

Lot Line Adjustment - Land use process that shifts the location(s) of lot line(s) but does not create or eliminate a unit of land, and where any reduced lots comply with the applicable zoning regulations. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development, Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments, and Section 2.14.60.

Lot Line, Front - In the case of an interior lot, a property line that abuts the public street or private street within a separate tract. In the case of a corner lot, or a lot where vehicular access is provided off an alley and there is no frontage on a public or private street, the front lot line is based on the structure's orientation and at least two of the following factors:

a. Location of the front door;

b. Location of the driveway (when accessed off a public or private street); or

c. Legal street address.

For the purposes of remodeling, rebuilding, constructing additions or accessory structures, etc., a corner lot's front lot line that was determined at the time of original construction of structure(s) on the lot may be considered valid.

Lot Line, Side - Lot boundary other than a front or rear lot line.

Lot Line, Rear - As shown below in Figure 1.6-20 - Rear Lot Line, lot line or lines most distant from and generally opposite the front lot line. In the case of an interior triangular lot or a lot with more than four sides, however, the rear lot line is a straight line 10 feet in length that:

a. Runs parallel to the front lot line or its chord; and

b. Intersects the other lot lines at points most distant from the front lot line.

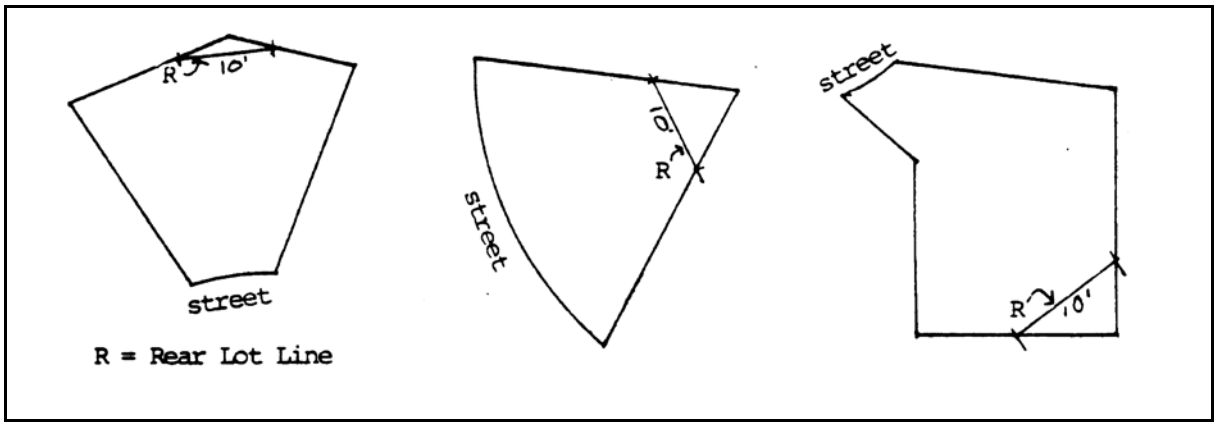


Figure 1.6-20 - Rear Lot Line

Lot of Record - Lot or parcel created through applicable Land Division regulations before adoption of this Code.

Lot, Reversed Corner - Corner lot with a rear lot line bordering the side yard of another lot, whether or not separated by an alley.

Lot, Tax - Parcel of real property shown on the County Assessor's map and identified by a tax lot number. A Tax Lot is not necessarily a Lot of Record.

Lot, Through - See Through Lot.

Lot Width - Horizontal distance between the midpoints of side lot lines.

Lowest Floor - ~~Lowest floor of the lowest enclosed area in a building, including a basement.~~ See "Lowest Floor" in Section 1.6.40. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*

Maintain - Support, keep, and continue in an existing state or condition without decline.

Manufactured Dwelling Facility - See definition under Building Types.

Manufactured Dwelling - A structure, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term Manufactured Dwelling does not include a Recreational Vehicle.~~Dwelling constructed to U.S. Department of Housing and Urban Development (HUD) standards since June 15, 1976, but not to State Building Code standards.~~ *[44 CFR 59.1, modified to replace "home" with "dwelling" to match Building Code, & Model Ordinance Section II - Definitions]*

Manufactured Dwelling Space - Portion of a Manufactured Dwelling Facility designated for occupancy of a Manufactured Dwelling or Mobile Home. Includes space for accessory structures and outdoor living areas, but excludes common areas such as roadways, guest parking, etc. See Manufactured Dwelling Facility under Building Types.

Manufactured Dwelling Stand - Portion of a Manufactured Dwelling space reserved solely for the location of a Manufactured Dwelling or mobile home structure. See Manufactured Dwelling Space.

Map Refinements - Adjustments made through professional analyses to refine the actual boundaries of some Natural Resources and Natural Hazards. Map Refinements must be made in accordance with this Code's provisions in Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, and are specifically allowed to determine the location and extent of: the 0.2-ft. Floodway; the 1.0-ft. Floodway; the Floodway Fringe (in accordance with FEMA regulations); the Top-of-bank of streams and rivers; Riparian Corridors (once Top-of-bank is accurately determined); and Wetlands (through delineations approved by the Oregon Department of State Lands).

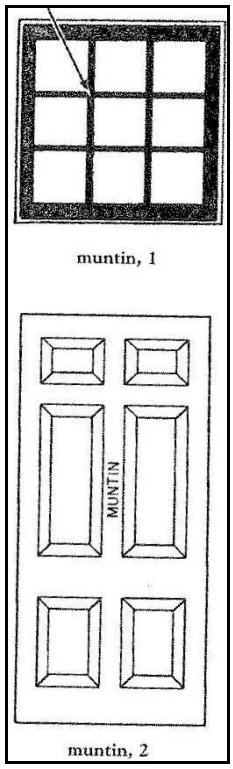


Figure 1.6-22.b Muntin

Mean Sea Level - See "Mean Sea Level" in Section 1.6.40. *[44 CFR 59.1, modified to add new datum, & Model Ordinance Section II - Definitions]*

Minimum Assured Development Area (MADA) - Minimum area on a development site that is permitted to be disturbed for development, regardless of the Natural Resources or Natural Hazards Overlay designation(s) on the site. The methodologies for determining the MADA are listed in Chapter 4.11 - Minimum Assured Development Area (MADA).

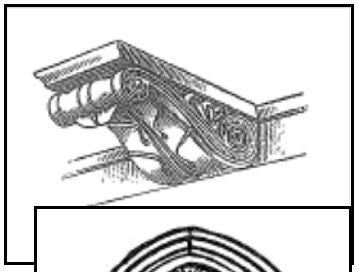
Ministerial Decision - Nondiscretionary decision made at a City staff level using the criteria and standards of this Code.

Mitigation - Methods used to alleviate or lessen the impact of development and/or to increase or improve Natural Resource functions within Natural Resource areas.

Mobile Home - Dwelling constructed for movement on public highways and constructed prior to adoption of June 15, 1976 U.S. Housing and Urban Development (HUD) standards, but meeting the requirements of Oregon's mobile home laws in effect at the time of original construction.

Mobile Home Park - See Manufactured Dwelling Facility under Building Types.

Modillion - As shown in Figure 1.6-21- Modillion, horizontal bracket or console, usually in the form of a scroll with acanthus, supporting the corona under a Cornice. Found in Corinthian, Composite, and, less frequently, Roman Iconic orders.[4]



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Modular Structure - Structure built off-site, but placed on a permanent foundation. Meets State Building Code standards.

Mullion - As shown in Figure 1.6-22 - Mullion, vertical member separating (and often supporting) windows, doors, or panels set in series.[5]

Muntin, Window - A secondary framing member to hold panes within a window, window wall or glazed door, as shown in Figure 1.6-22.b.[6]

National Geodetic Vertical Datum - Elevation reference mark used in determining a flood boundary and floodway maps, formerly referred to as Mean Sea Level.

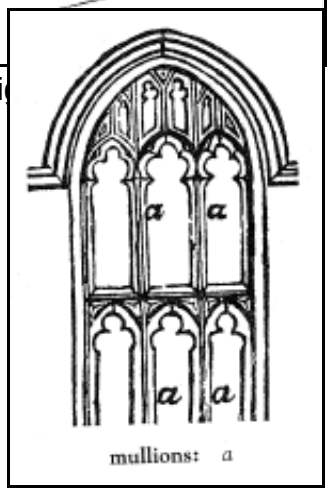

Figure 1.6-22 - Mullion

National Register of Historic Places (National Register) - Nation's official list of significant historic resources worthy of preservation, as authorized by the National Historic Preservation Act of 1966, as amended. The National Register of Historic Places is administered by the National Park Service, U.S. Department of the Interior. Historic resources may be added to the National Register of Historic Places on an individual basis and/or as part of a Historic District. Under state law, National Register of Historic Places historic resources are defined as historic resources of statewide significance. All National Register of Historic Places historic resources are defined as Designated Historic Resources in this Code.

National Register of Historic Places Historic District Classifications - Historic resources in an approved National Register of Historic Places Historic District are classified as Historic/Contributing, Historic/Noncontributing, or Nonhistoric/Noncontributing. The components of these classifications are defined as follows:

a. **Historic** - At least 50 years old at the time of designation and called out as Historic in the Historic District Nomination.

b. **Nonhistoric** - Not yet 50 years old at the time of designation or called out as Nonhistoric in the Historic District Nomination.

c. **Contributing** - A resource in a National Register of Historic Places Historic District which, at the time of designation, retained a sufficient amount of

[4] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

[5] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

[6] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

Historic Integrity relevant to the Period of Significance to convey its historic appearance and Historic Significance.

d. Noncontributing - A resource in a National Register of Historic Places Historic District which, at the time of designation, lacks Historic Integrity relevant to the Period of Significance, and/or which is not historic.

The City shall refer to the final approved National Register of Historic Places Historic District nomination forms to determine the appropriate classification that applies. In some cases, more than one classification may apply to a property; for example, a primary structure on a site, such as a Single-family detached home, may be classified as Historic/Contributing, while an accessory structure, such as a detached garage, may be classified as Nonhistoric/Noncontributing.

Vacant lots or parking lots shall be evaluated per the requirements for Nonhistoric/Noncontributing resources contained in this Code. Any reclassifications for these or any other Designated Historic Resources listed in a National Register of Historic Places Historic District shall be accomplished per state and federal requirements.

Natural Features Map Overlays - Comprehensive Plan and Zoning overlay designations for Natural Hazard areas and Natural Resource areas. Natural Features Map Overlays are designated on the Comprehensive Plan Map and the Official Zoning Map. The natural features are further identified on the Official Zoning Map's sub-maps entitled the Natural Hazards Map, the Significant Vegetation Map, and the Riparian Corridors and Wetlands Map.

Natural Hazards - Hazards regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions,~~-~~ and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Natural Resources - Resources regulated by ~~Chapter 4.5 - Natural Hazard and Hillside Development Provisions,~~ Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; as well as Significant Trees and Significant Shrubs, regulated by Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting .

Natural Swale - Naturally-occurring linear depression that carries surface water only after rainfall. It also transports sub-surface water either seasonally or throughout the year.

Net Aggregate Natural Features Area - As shown in Figure 1.6-23, the area containing protected Natural Hazards, plus the area containing protected Natural Resources, minus the overlap area containing both Natural Hazards and Natural Resources so that areas are not double-counted.

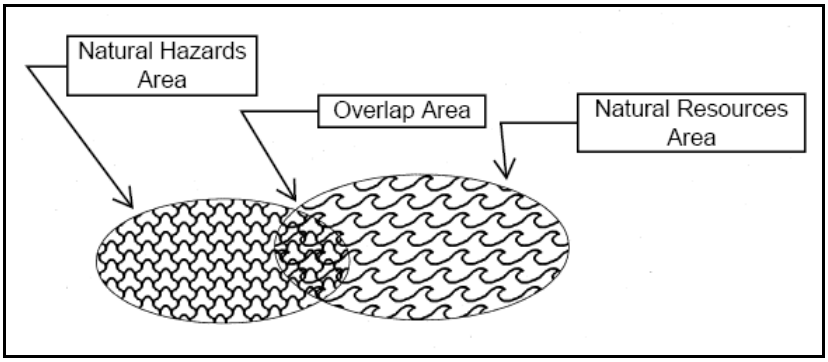

Figure 1.6-23 - Net Aggregate Natural Features Area

New Construction - See "New Construction" in Section 1.6.40. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*

Nonconforming Development - See Legal Nonconforming Development. Also pertains to an unlawful existing structure or use that does not conform to the requirements of this Code or any of its predecessors.

Nonhistoric - For historic resources not already specifically classified as part of a National Register of Historic Places Historic District (classifications for said District include Historic/Contributing, Historic/Noncontributing, and Nonhistoric/Noncontributing), the term Nonhistoric means resources that are less than 50 years old.

Non-native, Invasive, and/or Noxious Vegetation - Vegetation identified in the Oregon Department of Agriculture's Oregon Weed Policy and Classification System (Appendix 1), including weeds designated as "A," "B," and/or "T."

North American Vertical Datum of 1988 - The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of Canadian-Mexican-U.S. leveling observations. *[USGS website]*

North Campus Area - As shown in Figure 1.6-24, area generally located north of Monroe Avenue, south of Fillmore Avenue, east of Arnold Avenue, west of Eighth Street, and as particularly described in City Ordinance 92-28.

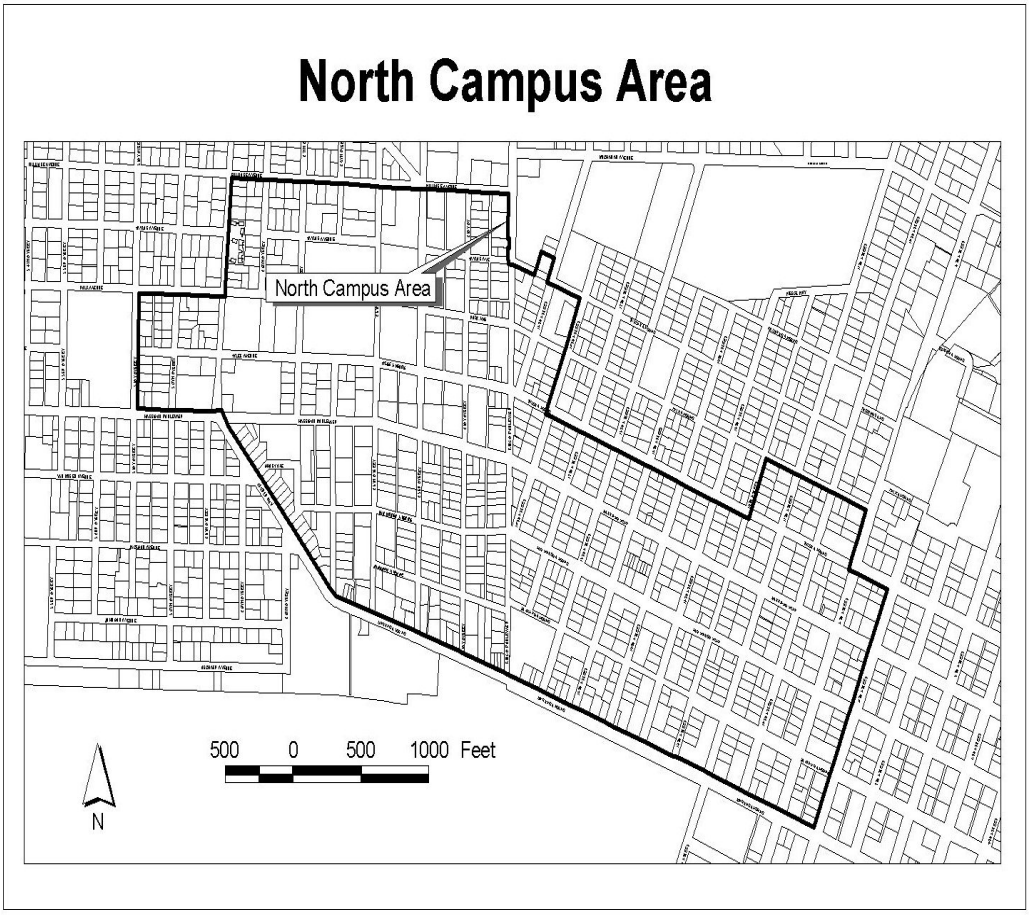

Figure 1.6-24 - North Campus Area

Notice of Disposition - Written communication that specifies the action of a Hearing Authority or Director concerning a development proposal.

NPDES – Refers to the National Pollution Discharge Elimination System, which is the permitting system established by the Environmental Protection Agency to administer the Federal Clean Water Act.

Nuisance - That which interferes with the enjoyment and use of property and is annoying, unpleasant, and/or obnoxious.

Office - Place designated for the Civic and Commercial Use Types of Administrative Services; Business Support Services; Financial, Insurance and Real Estate Services; Medical Services; and Professional and Research Services. See Chapter 3.0 - Use Classifications for definitions of these Use Types.

Open Space - Undeveloped or predominately undeveloped land, including waterways, in and around an urban area. Open Space lands are reserved for general community use, and include parks, preserves, general drainageway corridors, and other areas permanently precluded from development.

Order - Final disposition of a case which can be affirmative, negative, injunctive, or declaratory in form. Includes grant, conditional grant, or denial of an application for development.

Outdoor Space, Common - Areas intended for common outdoor active or passive recreational use. Normally includes swimming pools, recreation courts, patios, open landscaped areas, preserved natural areas, and/or greenbelts with pedestrian, equestrian, and/or bicycle trails, etc. Does not include off-street parking, loading areas, or driveways. Can be privately owned and maintained, or dedicated to the City.

Outdoor Space, Private - Areas intended for private outdoor active or passive recreational use by residents of an individual dwelling unit. Normally includes patios and landscaped areas. Does not include off-street parking, loading areas, or driveways.

Overlay - Overlay on a development zone created by ordinance in recognition of a property's or area's unique characteristics, such as Historic Resources, Natural Resources, Natural Hazards, or Willamette River Greenway; or an overlay created by ordinance to signify that a Planned Development exists or is needed. An overlay is applied over the top of a property's main zone. For example, a Planned Development applied to all or a portion of a Low Density Residential (RS-6) property would result in a PD (RS-6) Overlay . See Natural Features Map Overlays.

Parcel - Unit of land created from a Partition and intended for immediate or future transfer of ownership and/or development. See also Land, Parcel of and Lot.

Partition - See Land Division.

Patio - Inner courtyard or a space for dining or recreation, adjacent to a dwelling, that has a permanent hard surface for a floor (not gravel).

Pedestrian-friendly - Built environment or development pattern that provides direct and convenient access for handicapped persons and persons on foot (pedestrians) within a development and from a development to adjacent public transportation facilities, Such as sidewalks, bus routes, and bus shelters. A pedestrian-friendly environment also provides amenities such as window space for visual relief along sidewalks (rather than parking areas), doorways adjacent to public sidewalks for ease of access, awnings and other weather protection, benches, plazas, etc., which help to make walking an efficient and desirable method of transportation.

Perennial Stream - See Stream, Perennial.

Periodic Review - Process between the state, local governments, and others, requiring local governments to update their Comprehensive Plans and land use regulations to carry out State and local goals and objectives. Required every four to 10 years.

Period of Significance - Period of Significance is the length of time when a property was associated with important events, activities, or persons, or attained the characteristics which qualify it for National Register of Historic Places listing and/or Local Register listing. Period of Significance usually begins with the date when significant activities or events began giving the property its Historic Significance; this is often a date of construction. Period of Significance usually ends with

the date when the significant activities or events stopped giving the property its Historic Significance. For prehistoric properties, the Period of Significance is the broad span of time about which the site or district is likely to provide information; it is often the period associated with a particular cultural group.

Permeability – Ability of the soil to absorb water.

Permitted Outright - Development activity not subject to discretionary review. An example is a detached Single-family residence in an RS-3.5 Zone.

Person - Individual, corporation, governmental agency, business trust, estate, personal trust, partnership, association, two or more people having a joint or common interest, or any other legal entity.

Plan Compatibility Review - Land use process that provides an additional review of certain uses to ensure that the intensity and characteristics of the uses are compatible with particular sites and nearby land uses. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.13 - Plan Compatibility Review.

Planned Development - See Conceptual Development Plan and Detailed Development Plan.
Planned Development Modification (Major) - Land use process that provides an opportunity to allow flexibility with regard to site planning and architectural design for previously approved Conceptual or Detailed Development Plans. Such flexibility is in excess of the thresholds that define a Minor Planned Development Modification and provides benefits within the development site that compensate for requested variations from the approved Conceptual or Detailed Development Plan such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Section 2.5.60 - Planned Development Modification.

Planned Development Modification (Minor) - Land use process that provides an opportunity to allow a limited amount of flexibility with regard to site planning and architectural design for previously approved Conceptual or Detailed Development Plans; and provides benefits within the development site that compensate for requested variations from the approved Conceptual or Detailed Development Plan such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Section 2.5.60 - Planned Development Modification.

Planned Development Overlay - One of two types of overlays. One type is a zoning overlay that exists for the life of an active Conceptual or Detailed Development Plan. Procedures for this first type of Planned Development land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.5 - Planned Development. The other type is a zoning overlay established without an associated Conceptual or Detailed Development Plan. Procedures for this second type of Planned Development Overlay land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 3.32 - PD (Planned Development) Zoning Overlay.

Plat - See Final Plat.

Plat, Partition - See Final Plat, Partition.

Plat, Subdivision - See Final Plat, Subdivision.

Policy – Decision-making guideline for actions to be taken in achieving goals and the community's vision.

Practicable - Capable of being effected; feasible.

Pre-existing Condition – Phrase used in the Stormwater Master Plan (SWMP) as a reference to the land characteristics and habitat condition prior to man-made modifications.

Preservation Treatment (as applied to Designated Historic Resources) - As used in this Code, preservation treatment means activities that stabilize and maintain properties at a high level of Historic Integrity. When repair of a feature is no longer possible, preservation includes actions such as In-kind Repair and Replacement and often allows review through a Ministerial process.

Preserve – To save from change or loss and reserve for a special purpose. The most strict non-degradation standard.

Pretreatment – Treatment of urban runoff prior to discharging into a public water body.

Primary Source Material - Pertains to Designated Historic Resources. Primary source material includes historic photographs, design drawings or blueprints, or other information directly associated with a specific historic resource.

Primary Use - Main, principal, or predominant use.

Principal Use - See Primary Use.

Properly Functioning Condition (PFC) – National Marine Fisheries Service defines PFC as the sustained presence of natural habitat-forming processes that are necessary for the long-term survival of a species through the full range of environmental conditions.

Protect – To save or shield from loss, destruction, or injury or to save for future intended use.

Proximate Wetlands - See Wetlands, Proximate.

Quasi-judicial Decision - Similar to a court proceeding in which affected parties are afforded procedural safeguards. The quasi-judicial process is characteristic of most meetings of the Planning Commission and Land Development Hearings Board. Personal notice must be mailed to property owners and occupants living within a prescribed distance from the affected area. Unlike legislative cases, the Planning Commissioners or Land Development Hearings Board members are expected to avoid outside discussion of the business at hand and must declare *ex parte* contacts. See also Legislative Decision.

Recreational Vehicle - A vehicle that is ~~which includes all the following characteristics~~:

- B~~b~~uilt on a single chassis;
- 400 sq. ft. or less when measured at the largest horizontal projection;

- D~~d~~esigned to be self-propelled or permanently towed ~~towable~~ by a light duty truck; and

- D~~d~~esigned primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use ~~as opposed to a permanent dwelling~~. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Redevelopment – Restoring or replacing existing buildings. See also Infill.

Rehabilitation Treatment (as applied to Designated Historic Resources) - As used in this Code, Rehabilitation Treatment includes activities that modify properties. Though removal of Historically Significant features is discouraged, replacement with new materials and even new additions may be allowed, if they are compatible with the property's historic materials, features, size, scale and proportion, and massing to protect the Historic Integrity of the property and its environment. Approval generally requires quasi-judicial review by the Historic Resources Commission.

Replat (Major) - Land use process that is used when parcels within a recorded Subdivision are reconfigured such that four or more parcels are created or deleted in a calendar year. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 2.4 - Subdivisions and Major Replats, and Section 2.4.50 - Major Replat.

Replat (Minor) - Land use process that is used when parcels within a recorded Subdivision or Partition are reconfigured such that three or fewer parcels are created or deleted in a calendar year. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development, Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments, and Section 2.14.50.

Reserve Strip - Strip of land dedicated to the City and reserved for use as part of a future public street or facility.

Residential Care - Services such as supervision; protection; assistance while bathing, dressing, grooming, or eating; management of money; transportation; recreation; and the provision of room and board.

Residential Care Facility - Facility licensed by the state to accommodate more than five and fewer than 15 mentally or physically handicapped, elderly, or drug- or alcohol-dependent persons. Does not include resident staff persons engaged in their care.

Restoration – Process of returning an area to a close approximation of a former condition, and re-establishing functions.

Reversible - Pertains to Designated Historic Resources. Refers to modifications that do not substantially change, obscure, damage, or destroy character-defining materials, features, or finishes. Intent is that the modification could be removed and any impacted character-defining materials, features, or finishes could then be restored.

Right-of-Way - Public travel route dedicated for vehicular, bicycle, or pedestrian use. Can and often does contain public and franchise utilities.

Riparian Area or Riparian Corridor - Land adjacent to a water body that directly affects or is affected by the aquatic environment. This includes Streams, rivers, and lakes and their side channels, Floodplains, and Wetlands, and portions of adjacent slopes that shade the channel or provide streamside habitat. The area of transition from an aquatic ecosystem to a terrestrial system.

Riparian Assessment Area - Bounded area inventoried for the Riparian Assessment portion of the Natural Features Inventory.

Riparian Corridor - See Riparian Area.

Riparian Management Zone - Area within the Willamette River Greenway, extending from the edge of the waterway to either the Top-of-bank or to the 10-year Floodplain, whichever is greater.

Riparian Corridors, Regulated - Riparian and associated upland areas regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions to protect Riparian Areas and water resources. Regulated Riparian Corridors are clearly defined on the Comprehensive Plan Map, Official Zoning Map, and Riparian Corridors and Wetlands Map. Regulated Riparian Corridors have been identified for both Intermittent and Perennial Streams and widths are measured from Top-of-bank and based on areas drained. See Top-of-bank and Upland Natural Resources.

Riparian Function - A characteristic action or role provided by riparian areas, such as water quality, flood management, thermal regulation, and wildlife habitat.

Riparian Vegetation - For the purposes of these regulations, vegetation located within the Regulated Riparian Corridor.

Sash, Window - Any framework of a window; may be movable or fixed; may slide in a vertical plane (such as a double-hung window) or may be pivoted (such as a casement window). For the purposes of this definition, a window sash also includes the top and bottom rails and stiles as shown in Figure 1.6-24.b.[7]

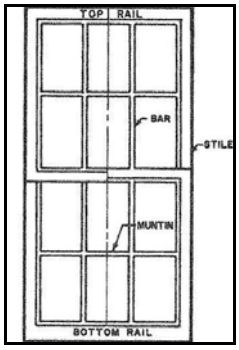

Figure 1.6-24.b - Sash

Secondary Source Material - Pertains to Designated Historic Resources. Secondary Source Material includes information such as photos, design drawings, or other information depicting structures or appurtenances similar to and/or from the same Period of Significance as the Designated Historic Resource for which a Historic Preservation Permit is being requested.

Setback - Minimum allowable horizontal distance from a property line (unless otherwise noted) to the nearest vertical wall of a building or structure, fence, or other element as defined by this Code.

Shall – Expressing what is mandatory.

[7] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

Shallow Flooding, Area of - See "Area of Shallow Flooding" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Should – Expressing what is desired, but not mandatory.

Sign - Device or medium affixed to property (including the device or medium's structure, lighting, materials, and component parts) which by reason of its form, color, wording, symbol, design, and illumination, visually communicates, identifies, advertises, informs, announces, or attracts attention to the subject thereof.

Sign, Area - As shown in Figure 1.6-25 - Sign Area, square footage of a sign face within a single continuous rectilinear perimeter that encloses the extreme limits of a sign. Excludes the pole or base of free-standing signs. Where a sign is more than one ft. thick, has more than two faces, or is three dimensional, the Sign Area calculation is based on 50 percent of the surface area of the four vertical faces of the smallest rectangular solid that can be formed around the sign.

The area of a sign on an awning, where the awning projects more than six ft. from the building face over a walkway to provide weather protection, is determined using the smallest rectangle around the graphic on the awning. A sign on an awning that projects less than six ft. shall be considered a three-dimensional sign.

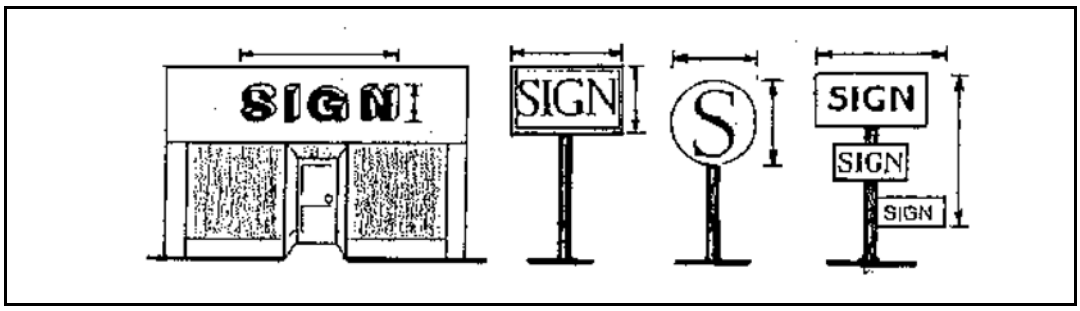

Figure 1.6-25 - Sign Area

Sign, Attached - Sign attached to the primary building on the subject property. Includes wall, projecting, fin, parapet, marquee, and awning signs.

Sign, Blade - Narrow sign extending perpendicular to a building over a sidewalk.

Sign Clearance - Height measured from the highest grade directly beneath the sign to the bottom of the sign structure enclosing the sign face.

Sign, Detached - Structurally self-supporting sign not attached to a building, including pole, ground, and monument signs.

Sign Frontage, Primary - Length of the property line parallel to and along the street right-of-way adjacent to a property. On Through Lots, primary frontage corresponds to the legal street address, auto entrance, building entrance, or front yard of the property.

Sign Frontage, Secondary - Face of a building oriented toward an on-site parking lot, private roadway, or public alley.

Sign Height - As shown in Figure 1.6-26 - Sign Height, height as measured from the lowest grade directly beneath the sign to the top of the sign structure enclosing the sign face.

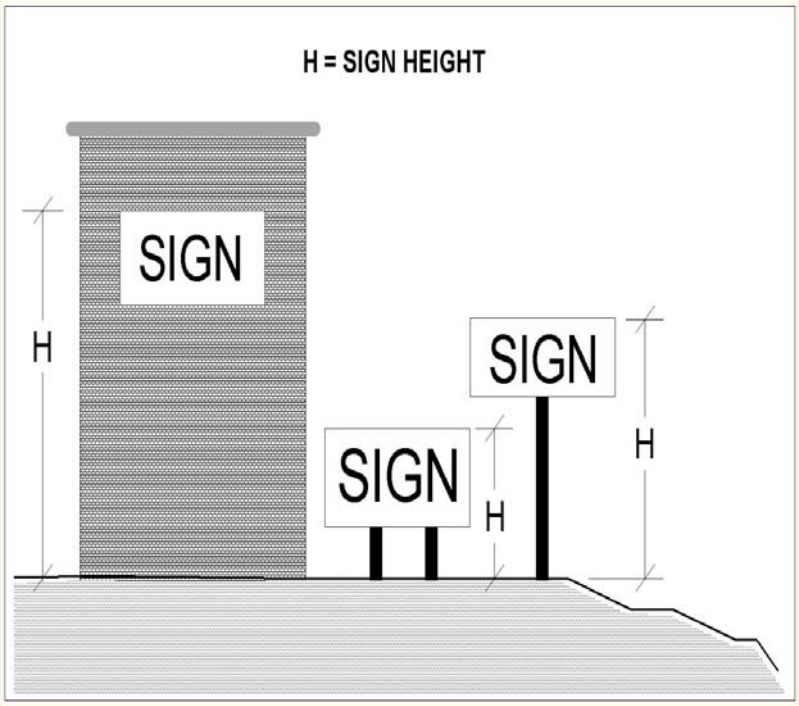

Figure 1.6-26 - Sign Height

Sign, Permanent - Sign permanently affixed or attached to a building, structure, or to the ground.

Sign, Temporary - Sign temporarily affixed or attached to a building, structure, or to the ground, and/or intended to be displayed for a limited time.

Sign, Variable Message - Sign which utilizes manual, mechanical, electro-mechanical, electronic, radio-frequency, fiberoptic, or other automated means of changing the sign message or copy at timed intervals. Includes LED, incandescent luminaries, electronic message centers, and video display boards.

Sign Variance - Land use process to request a deviation from the provisions of Chapter 4.7 - Sign Regulations. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Section 4.7.110.

Significant – Feature that has been specifically identified as worthy of special recognition or protection such as a Significant Wetland, etc., or a resource that has been formally identified by the City through adopted plans and ordinances.

Significant Natural Features - See Natural Hazards and Natural Resources.

Significant Shrub - Excluding Non-native, Invasive, and/or Noxious Vegetation, a Significant Shrub is a living, standing plant that is either:

a. Required to be preserved through the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; or

b. Over four ft. in height and located outside any area inventoried by the Natural Features Inventory.

Significant Tree - Excluding Non-native, Invasive, and/or Noxious Vegetation, a Significant Tree is a living, standing woody plant that is either:

a. Required to be preserved through the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; or

b. Located outside any area inventoried by the Natural Features Inventory and of a trunk size that is eight in. or greater in caliper at four ft. above existing grade.

Significant Vegetation - Vegetation identified and assessed in the Natural Features Inventory and determined to be significant through the Natural Features Project. Significant Vegetation is clearly identified on the Significant Vegetation Map and through the provisions of Chapter 4.12 - Significant Vegetation Protection Provisions.

Significant Vegetation Management Plan - Plan required by Chapter 4.12 - Significant Vegetation Protection Provisions prior to the removal of any vegetation governed by the provisions of Chapter 4.12, and required either prior to or as part of a land use application, building permit application, or construction permit application, whichever comes first.

Slope - As shown in Figure 1.6-27 - Slope, the deviation of a surface from the horizontal, usually expressed in percent or degrees. See also Grade.

Soil Bioengineering - Method of soil or land stabilization that uses living plant material selected for the specific site situation as the major structural or engineering component of the stabilization.

Solar Access - Line-of-sight path to the sun during hours that provide beneficial use of solar energy.

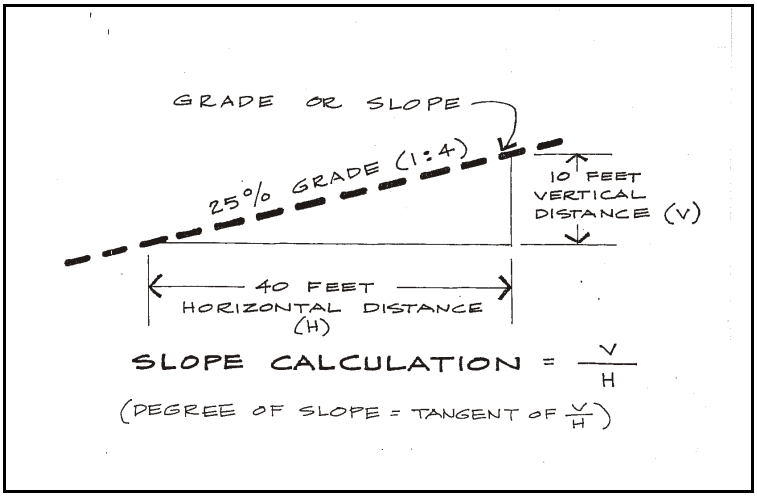

Figure 1.6-27 - Slope

Solar Access Easement - Private agreement between property owners that protects Solar Access. Solar Easements are prepared and recorded pursuant to ORS 105.880-105.895, as amended.

Solar-access-friendly Trees - Trees with minimal effect on Solar Access during winter months because of their leafing and branching characteristics; deciduous trees.

Solar Access Permit (Type 1) - Land use process that provides and protects Solar Access for use of a property owner(s) by limiting shading of a solar collector by trees on adjacent properties. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.18 - Solar Access Permits.

Solar Access Permit (Type 2) - Land use process that provides and protects Solar Access for use of a property owner(s) by limiting shading of a solar collector by structures on adjacent properties. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.18 - Solar Access Permits.

Solar Access Protection - Right to unobstructed Solar Access for at least four hours between 9 a.m. and 3 p.m. on November 21 of each year.

Solar Building Line - Southern-most place that the south wall of a house can be located and still receive shade protection from buildings located off-site to the south.

Solar Collector - Heating or cooling system in which the thermal energy of solar radiation is captured and stored for later release.

Solar Energy System - Set of devices used to collect solar energy and convert and store it for purposes including heating and cooling of buildings or for the production of power.

a. **Active** - Solar energy system that uses a separate collector to transform solar radiation into usable heat and a mechanical system to transfer heat to its point of use.

b. **Passive** - Solar energy system that uses natural and architectural components to collect and store solar energy using minimal or no external mechanical equipment.

Solar Envelope - Drawing or representation by contour lines of a three-dimensional space over a lot or development site representing the allowable height of structures and vegetation that provides Solar Access protection for neighboring lots.

Solar South - Thirty degrees east to 30 degrees west of true south. In Corvallis, true south is 20 degrees east of magnetic south.

Special Development Decision - Development decision that requires considerable discretion in applying criteria and standards of this Code. Involves a public hearing in accordance with the provisions in Chapter 2.0 - Public Hearings, as well as approval by an established Hearing Authority.

Special Flood Hazard Area - See "Special Flood Hazard Area" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Special Occupancy Structure - See "Special Occupancy Structure" in Section 1.6.40. *[ORS 455.447 & Model Ordinance Section II - Definitions]*

Special Zone - Zone created by ordinance in recognition of an area's unique characteristics such as environmental or historic resources, Natural Resources, Natural Hazards, or an identified need for redevelopment.

Specification Standards - Measurable standards applicable to development. These standards contain the minimum requirements for design and construction of improvements covered by this Code.

Staff - Administrative officers responsible for the operation and management of the City's departments and divisions.

Start of Construction - See "Start of Construction" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

State Historic Preservation Office (SHPO) - Agency of state government delegated the authority from the federal government to administer a state's historic preservation program consistent with state and federal law.

Stormwater – Rainfall or snow melt that drains into streams or pipes.

Stormwater Functions – Includes interception and temporary storage of precipitation, natural surface conveyance, stream subsurface flow, infiltration, ground water recharge, sediment and pollutant filtration, cooling, sustaining aquatic habitats, cleansing, nutrient transfer, and other beneficial functions.

Stormwater Phase II Rules – Federal Clean Water Act regulations that deal with runoff water quality issues, including pollutants and construction sediments.

Stream - A channel such as a river or creek that carries flowing surface water, including Perennial Streams and Intermittent Streams with defined channels, and excluding man-made irrigation and drainage channels.

Stream Corridor – Corridor of land of variable width along each side of a stream channel that is primarily reserved for stormwater-related and other stream system functions and processes.

Stream Corridor Functions – Attributes (uses and processes) that are connected with a Stream Corridor. These include ecological functions like pollutant filtering, shading the channel, floodwater management, supplying food for fish (insects, leaves, etc.) and other aquatic life, providing space for channel movement, and providing large wood to the channel when trees die.

Stream, Ephemeral - Stream that has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Ground water is not a source of water for Ephemeral Streams.

Stream, Intermittent - Stream that flows primarily during the wet seasons when the water table is high, and remains dry for a portion of the year. Most Intermittent Streams flow for a good portion of the year (DSL -- ORS 196.800, as amended). Typically, when Intermittent Streams lack surface flow, they continue to have ground water flow through gravels below the surface. Intermittent Streams in Corvallis, defined through the Natural Features Scoping Project, are further defined as natural drainageways that:

a. Do not have year-round flows in a water year (October 1 through September 30) based on a precipitation total at the time of determination that is within 20 percent of average total precipitation for the past 30 years; and

b. Drain at least 20 acres.

Upon field verification, an Intermittent Stream may be defined to include a distinct channel upstream from the 20-acre drainage basin, provided that Riparian Vegetation is present.

Stream, **Perennial** - Stream that has flowing water year-round during a typical year. The water table is located above the streambed for most of the year. Ground water is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow. Perennial Streams in Corvallis, defined through the Natural Features Scoping Project, are further defined as natural drainageways that include all stream segments inventoried through the City of Corvallis Endangered Species Act 2001 Inventory and other drainageways that:

a. Have year-round flows in a water year (October 1 through September 30) based on a precipitation total at the time of determination that is within 20 percent of average total precipitation for the past 30 years; and

b. Drain at least 20 acres.

Stream System – Channel, subsurface flow, and adjacent corridor, including the floodplain.

Streets - Designated in the City of Corvallis Transportation Plan as outlined in "a," through "h," below. See also Chapter 4.0 - Improvements Required with Development.

a. **Arterial Highways** - These consist of state highways, which are the primary gateways into Corvallis and carry nearly all vehicles entering, leaving, or passing through the Corvallis area. The ORE 34/US 20 corridor is designated a Statewide Highway on the National Highway System (NHS) and is a key corridor between I-5 and the Oregon coast.

b. **Arterial Streets** - These connect the state highways, linking major commercial, residential, industrial, and institutional areas. Arterial Streets are critical to the Corvallis street network because they generally serve the highest traffic volumes and longest trips. Access control is critical on these facilities to ensure safe and efficient operation.

c. **Collector Streets** - These provide both access and circulation within residential neighborhoods and commercial/industrial areas. Collector Streets differ from Arterial Streets in two ways:

1. Controlled access may not be required for all Collector Streets; and

2. Collector Streets penetrate neighborhoods, distributing vehicles from the Arterial Streets through the area to their ultimate destinations.

The standard Collector Street is characterized by a range of uses that typically result in a greater intensity of development along its route or at major intersections with other Collector Streets or Arterial Streets.

d. **Neighborhood Collector Streets** - These minimize the impact of traffic to adjacent land uses and provide necessary access to residential areas. Neighborhood Collector Streets are similar to standard Collector Streets in that controlled access is unnecessary and that they penetrate neighborhoods, distributing vehicles from the Arterial Streets through the

area to their ultimate destinations. In the case of a Neighborhood Collector Street, however, land use along its route is generally Low to Medium Density Residential. The intensity of development at intersections along its route is also generally less intense than might occur for standard Collector Streets. Traffic calming devices, if used, can be constructed at the time of development.

e. **Cul-de-Sac** - Local Street with one outlet and a turnaround. Because emphasis should be placed on the creation of a roughly rectilinear street pattern that encourages the dispersion of local traffic through a number of streets, the use of Cul-de-sacs should be minimized. See Comprehensive Plan Policy 11.3.8.

f. **Local Streets** - These provide access to immediately adjacent land. Although through-traffic movement on new Local Streets usually is deliberately discouraged, this may not be practical for particular neighborhoods. Local Connector or Local Street designations shall be applied to newly developing areas based on review of a street network plan and, in some cases, a traffic study provided with the development application. These designations are based on a number of factors, including density of development, anticipated traffic volumes, and the potential for through traffic. Street network plans must provide for connectivity within the transportation system to the extent that, generally, both Local Connector and Local Streets shall be created within a development. Traffic calming devices can be constructed at the time of development.

g. **Local Connector Streets** - These provide some through-traffic functions within a particular development and access from Local Streets to Arterial, Collector, Neighborhood Collector, or other Local Streets. Local Connector Streets are generally the means by which traffic accesses the community Arterial-Collector Street system.

h. **Shopping Streets** - These are located within Neighborhood Centers and may include Local, Local Connector, Neighborhood Collector, and/or Collector Streets. Access control and traffic calming along Shopping Streets shall be typical; sidewalks shall be wider to enhance special pedestrian accessibility and shopping opportunities; and planting strips shall be reduced or eliminated, provided that tree wells and other vegetation amenities, such as permanent on-ground or hanging planters, are furnished and maintained**.**

Structure - Combination of materials to form a construction for use, occupancy, or ornamentation whether installed on, above, or below the surface of land or water. For the definition of Structure as applied to the 100-year Floodplain regulations contained in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, see Section 1.6.40. *[44 CFR 59.1, modified for clarify, & Model Ordinance Section II - Definitions]*

Structure Height - See Height of Buildings.

Subdivision - See Land Division.

Substantial Damage - Damage to structures within the 100-year Floodplain~~, damage to Nonconforming Structures,~~ and/or damage to structures containing Nonconforming Uses, as defined below:

a. **Substantial Damage to Structures within the 100-Year Floodplain** - For the definition of Substantial Damage as applied to the 100-year Floodplain regulations contained in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, see Section 1.6.40.~~Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed 50 percent of the structure's market value before the damage occurred. Substantial Damage also pertains to flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the structure's market value before the damage occurred. Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, substantial improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft.-Floodway.~~ *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

b. **Substantial Damage to Structures Containing Nonconforming Uses** - Damage of any origin sustained by a structure containing a Nonconforming Use, to an extent exceeding ~~60~~ 50 percent of the structure's market value before the damage occurred.

Substantial Improvement - ~~Any~~ R~~r~~ehabilitation, repair, reconstruction, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the structure's market value before the S~~s~~tart of C~~c~~onstruction of the improvement. This term includes structures which have incurred Substantial Damage, regardless of the actual repair work performed. The market value of the structure is:

a. The appraised real market value of the structure prior to the start of the initial repair or improvement; or

b. In the case of damage, the appraised real market value of the structure prior to the damage occurring. The term does not include either:~~Substantial Improvement exempts the following:~~

~~(a)~~1. A project for ~~Any~~ improvement ~~to~~ of a structure ~~that would make it comply with~~ to correct existing violations of state or local health, sanitary, or safety ~~regulations~~ code specifications, which have been identified by the local code enforcement official and which are the minimum necessary to ensure ~~assure~~ safe living conditions; or

~~(b)~~2. ~~Any a~~Alteration of an Historic S~~s~~tructure, ~~listed on the National Register of Historic Places.~~ , provided that the alteration will not preclude the structure's continued designation as an Historic Structure. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

~~Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, substantial improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft. Floodway.~~

Sunchart - Photograph showing the sun's positions during different hours and seasons of the year and any trees, buildings, or topographies that obstruct Solar Access. The Sunchart shall include as coordinates the solar altitude in 10-degree or smaller increments and solar azimuth in 15-degree or smaller increments.

Sustainable - Able to be maintained or continued indefinitely.

Tentative Subdivision Plat - See “b” under Land Division.

Tentative Subdivision Plat Modification - Land use process that provides an opportunity to allow a limited amount of flexibility with regard to site planning for a previously approved Subdivision; and provides elements within the development site that compensate for requested variations from the approved Tentative Subdivision Plat such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Section 2.4.80 - Tentative Subdivision Plat Modification.

Through Lot - Lot that fronts two parallel streets or that fronts two streets that do not intersect at the lot’s boundaries.

Through Lot Easement - Landscape easement adjacent to a street and adjacent to or part of a Through Lot. Contains landscape screening.

Timber Harvest, Commercial - Cutting, removing, severing from the land, trees for wood production and/or for sale. Commercial Timber Harvesting may be regulated by the Oregon Forest Practices Act. Christmas tree farming is not a form of Commercial Timber Harvesting. It is an agricultural land use.

Timber Harvest, Noncommercial - Cutting, removing, severing from the land, trees for personal use such as fire wood, and/or clearance to create development areas. Wood is not sold to another party, and activities are generally not regulated by the Oregon Forest Practices Act.

Top-of-bank - Bankfull stage of a Stream or river which is the stage or elevation at which water overflows the natural banks of Streams or other waters of this state and begins to inundate the upland. In the absence of physical evidence, the two-year recurrence interval flood elevation may be used to approximate the bankfull stage or delineate the Top-of-bank.

Traffic Calming - Use of devices to slow traffic speeds. Devices include bulbed intersections, speed humps, raised planted medians, mid-block curb extensions, traffic circles, signage, and varied paving materials. Traffic Calming is addressed in the Transportation Plan and may be used on Neighborhood Collector and Local Streets.

Tree Canopy - A view which is dominated by the appearance of trees. As used in the Comprehensive Plan, Tree Canopy refers to those hillside areas where trees are the major visual feature when viewed from a horizontal plane or from lower elevations.

Tree Canopy Coverage - The percentage of a lot, parcel, tract, development site, and/or common area that is within the drip line of trees as measured on a horizontal plane.

a. **Mature Tree Canopy Coverage** - The area that is expected to be within the drip line at the anticipated time of maturity of the tree by species.

b. **Fifteen-year Mature Tree Canopy Coverage** - The area that is expected to be within the drip line at year fifteen from the date of planting based upon a planting of one- or 1.5-in. caliper trees and based upon the specific tree by species.

Tree Grove - A group of trees that are predominantly 25 ft. or more in height and have continuous canopy cover of 0.5 acre or more and are identified in the Natural Features Inventory.

Tree Grove, Isolated - Tree Groves that are not located within other resource areas.

Tree Grove, Mitigation - Tree Groves required to be planted or retained as mitigation for development.

Tree, Hazardous - Trees which are determined by a certified arborist and/or the City Urban Forester to be of immediate health, safety, or welfare threat to persons or property. Immediate health, safety, or welfare threat includes damage to persons or property from tree collapse or limb breakage that is imminent or expected during average annual winter storm events. Hazardous Trees include trees that are cracked, split, leaning, or physically damaged to the degree that they are likely to fail and injure persons or property. Hazardous Trees also include trees that are sufficiently diseased, damaged, and/or decayed that treatment to restore their health is not warranted, and that without reasonable treatment and pruning, the disease is likely to spread to adjacent trees and cause such adjacent trees to become diseased or hazardous.

Tree, Large Canopy - Trees that, at maturity, are expected to have a Tree Canopy Coverage of 30 ft. or more in diameter.

Tree, Medium Canopy - Trees that, at maturity, are expected to have a Tree Canopy Coverage of less than 30 ft. in diameter.

Undeveloped Land in the 100-year Floodplain - Either: (1) land that does not contain a primary structure; or (2) in cases where land does contain a primary structure, then land that can be divided and the resulting vacant parcels can be developed per this Code.

Unwanted Species – Species that are either nonnative or that do not contribute to the Properly Functioning Condition of an adjacent stream.

Upland Natural Resources – Natural Resources, NaturalHazards, and areas outside of the Stream Corridor and the 100-year Floodplain that influence stormwater function and management. They include uplands, Wetlands, vegetation, swales, and ground water zones.

Urban Fringe – Area within the Urban Growth Boundary and outside the City limits.

Urban Growth Boundary – Line that circumscribes the Urban Fringe and the City Limits and that is intended by state and local regulations to contain the area available to urban development.

Urban Stream – Seasonally or perennially surface-flowing Watercourse presently with a defined channel, including Watercourses in either a native or altered form.

Use - Purpose of or activity on a site.

Use Type - Classification of a Use or Uses on the basis of common functional, product, or compatibility characteristics, thereby regulating Uses in accordance with criteria directly relevant to the public interest. See Chapter 3.0 - Use Classifications for definitions of specific Use Types.

Vacate - Release of interest in a piece of property.

Vacating of Public Lands and Plats - Land use process that petitions to vacate all or parts of a public street, alley, easement, plat, or other public place if determined not to be harmful to the City or adjacent properties. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.8 - Vacating of Public Lands and Plats.

Vegetation Cover Types, ARA - ARA habitat classes in the Natural Features Inventory. The Vegetation Cover Types, or ARA habitat classes, are as shown below in Table 1.6-1 - Vegetation Cover Types.

Table 1.6-1 - ARA Vegetation Cover Types	
6. Conifer > 70% closed canopy	15. Seasonally inundated shrub wet valley
7. Mixed Forest > 70% closed canopy	20. Grass short (lawn, pasture)
8. Hardwood > 70% closed canopy	21. Grass natural/dry prairie
9. Conifer woodland 30-70% closed canopy	22. Grass tall (ryegrass, meadow)
10. Mixed woodland 30-70% closed canopy	23. Bare soil/rock/burnt
11. Hardwood woodland 30-70% closed canopy	26. Emergent/herb wetland or pond (seasonal)
12. Open (30% canopy) non-oak woods	27. Emergent wetland or pond (water year-round)
13. Oak savanna (30% canopy)	30. Developed
14. Shrub dry, tree open	

Vegetation Sub-polygon - A subarea within a wildlife habitat area containing a single Vegetation Cover Type such as conifer woodland or oak savanna. See the wildlife habitat assessment portion of the Natural Features Inventory for the definition of wildlife habitat area.

Vertical Addition - The addition of a room or rooms on top of an existing building. *[Model Ordinance Section II - Definitions]*

Visible from Public Rights-of-way (Excluding Alleys) and Private Street Rights-of-way - As indicated by the arrows in Figure 1.6-28 - Visibility from Streets, structures and appurtenances that face public rights-of-way (excluding alleys) and private street rights-of-way are considered visible unless screened consistent with "a," or "b," below. In all

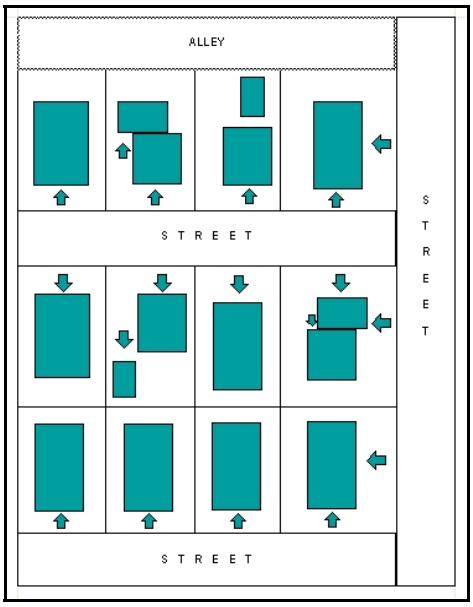

Figure 1.6-28 - Visibility from Streets

cases the screen shall be of an equal or greater height and width as the structure being screened.

The structure or appurtenance shall be screened by:

a. A solid structure; or

b. A hedge or fence with a minimum opacity of 80%.

Vision Clearance Area - Specific distances and prohibitions on visual obstructions within Vision Clearance Areas are determined by the City Engineer.

Visual Obstruction - Fence, hedge, tree, shrub, device, wall, or structure between the elevations of two ft. and eight ft. above the adjacent curb height or above the elevation of the gutter line of a street edge where there is no curb, as determined by the City Engineer, and so located at a street, driveway, or alley intersection as to limit the visibility of pedestrians or persons in motor vehicles.

Watercourse - Any natural or artificial Stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which water:

a. Flows in a definite direction or course, either continuously or intermittently;

b. Has a definite channel, bed, and banks; and

c. Includes an area adjacent thereto subject to inundation by reason of overflow or floodwater.

Water-dependent - Use or activity that can be carried out only on, in, or adjacent to water areas because the Use requires access to the water source or to the water body for water-borne transportation, recreation, or energy production.

Water-related - Use not directly dependent upon access to a water body, but that provides goods or services directly associated with Water-dependent land or waterway use and that, if not located adjacent to water, would result in a public loss of quality in the goods or services offered. Residences, parking lots, spoil and dump sites, roads and highways, restaurants, businesses, factories, and Manufactured Dwelling Facilities are not generally considered Water-dependent or Water-related.

Water Service Levels - The Corvallis Urban Growth Boundary is divided into four Water Service Levels based on elevation and associated water pressure in each area. These elevation ranges are:

a. 1st level = 210 ft. to 290 ft.;

b. 2nd level = 290 ft. to 410 ft.;

c. 3rd level = 410 ft. to 560 ft.; and

d. 4th level = above 560 ft.

The 4th Water Service Level is not served by City water.

Watershed – Drainage area of a specific stream system. Small Watersheds are components of larger Watersheds.

Water Surface Elevation - The height, in relation to a specific Datum, of floods of various magnitudes and frequencies in the Floodplains of coastal or riverine areas. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Wetlands - Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are generally characterized by one of three parameters; certain soil types, aquatic plants, and hydrology.

Wetland Assessment - Determining the relative quality of a Wetland by assessing its functions and conditions. The methodology generally used to determine the relative quality of Wetlands for purposes of a Local Wetlands Inventory (LWI) is the Oregon Freshwater Wetland Assessment Methodology (Roth, et.al. 1996).

Wetland Delineation - Process of determining the boundary between a Wetland and an uplands. Delineations must be carried out following the guidelines of the U.S. Army Corps of Engineers and the Oregon Department of State Lands. A Wetland Delineation locates the boundary between the Wetland and upland, based on the field indicators of vegetation, soils, and hydrology.

Wetland Function - A characteristic action or behavior associated with a Wetland that contributes to a larger ecological condition such as wildlife habitat, water quality, and/or flood control.

Wetland Hydrology - Permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the upper soil profile.

Wetlands, Jurisdictional - Wetlands regulated by the state and/or federal government.

Wetlands, Local Wetlands Inventory (LWI) - An inventory of all Wetlands greater than 0.5 acre within a jurisdiction using the standards and procedures of OAR 141-86-110 through 141-86-240, as amended over time. Local Wetlands Inventory information and mapping are intended for planning purposes only. Mapped Wetland boundaries are accurate to within 25 ft. However, there may be unmapped Wetlands that are subject to state and federal regulation. In all cases, actual field conditions determine specific Wetland boundaries.

Wetlands, Locally Protected Locally Significant Wetlands (LPLSW) - Locally Significant Wetlands that are protected through local government regulations, in addition to any state or federal regulations.

Wetlands, Locally Significant Wetlands (LSW) - Wetlands determined to be locally significant in compliance with Oregon Administrative Rules (OARs), which meet the Oregon Freshwater Assessment Methodology criteria for Locally Significant Wetlands; and which have been adopted in the Local Wetlands Inventory as being locally significant. Locally Significant Wetlands are identified on the Locally Significant Wetlands Map.

Wetlands, Proximate - Jurisdictional Wetlands within or adjacent to a Riparian Corridor that are not limited to Locally Significant Wetlands. These Proximate Wetlands enhance Riparian Function and receive protection as part of a Riparian-related area.

Wetlands Regulations - Regulations pertaining to Wetlands in the State or Oregon, including:

a. State of Oregon Department of State Lands regulations from the Removal-Fill Law outlined in ORS 196.800-196.990, as amended over time;

b. U.S. Army Corps of Engineers through Section 404 of the Clean Water Act, as amended over time; and

c. City of Corvallis regulations as amended over time and pertaining to:

1. Locally Protected Locally Significant Wetlands;

2. Wetlands located in Riparian Corridors, with respect to the Wetlands' Riparian Function and Floodplain Functions; and

3. Wetlands located in the 100-year Floodplain, with respect to the Wetlands' Riparian Function and Floodplain Functions.

Willamette River Greenway Conditional Development - Land use process that is a type of Conditional Development required for development within lands subject to a Willamette River Greenway (WRG) Zoning Overlay, when the development is not considered Exempt per the provisions of Section 3.30.30 - Exemptions. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 3.30 - WRG (Willamette River Greenway) Zoning Overlay, and Chapter 2.3 - Conditional Development.

Yard - Open space unobstructed from the ground upward except as otherwise provided in this Code. In the case of a corner lot, the front, rear, and side yards that were determined at the time of original construction of structure(s) on the lot may be used for the purposes of remodeling, rebuilding, and/or constructing additions, accessory structures, etc.

Yard, Exterior Side - As shown in Figure 1.6-29 - Exterior Side Yard below, the yard extending from the front yard to the rear lot line on the street side of a corner lot.

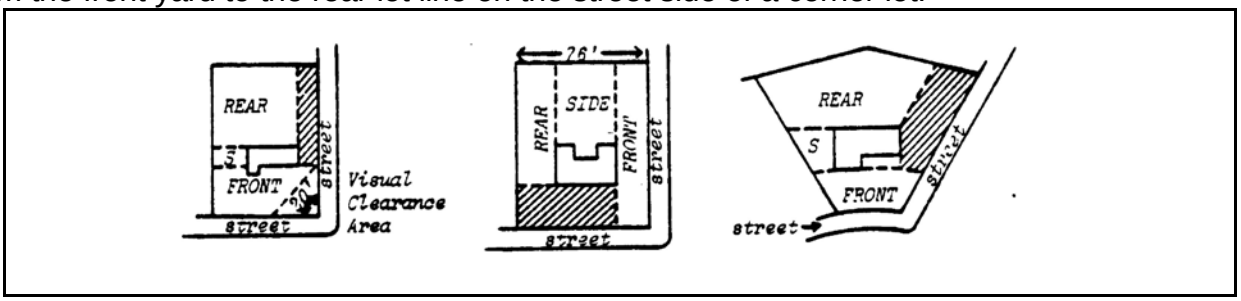

Figure 1.6-29 - Exterior Side Yard

Yard, Front - As shown in Figure 1.6-30 - Font Yard below, the yard extending across the full width of the lot, the depth of which is the minimum horizontal distance between the front lot line and a line parallel to the nearest point of the main building.

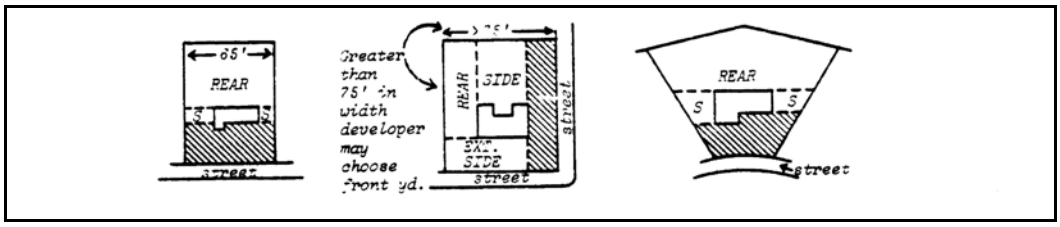

Figure 1.6-30 - Front Yard

Yard, Rear - As shown in Figure 1.6-31 - Rear Yard below, yard extending across the full width of the lot, the depth of which is the minimum horizontal distance between the rear lot line and a line parallel to the nearest point of the main building.

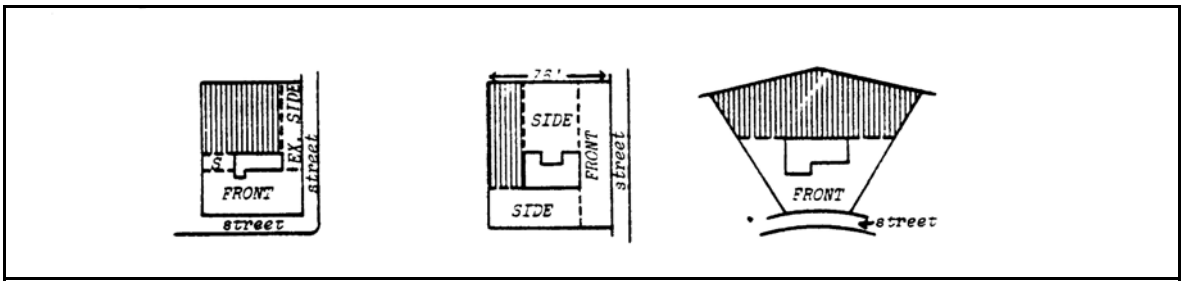

Figure 1.6-31 - Rear Yard

Yard, Side - As shown in Figure 1.6-32 - Side Yard below, yard between the main building and the side lot line extending from the front yard or front lot line where no front yard is required, to the rear yard. The width of the required side yard is the minimum horizontal distance between the side lot line and a line parallel to the nearest point of the main building.

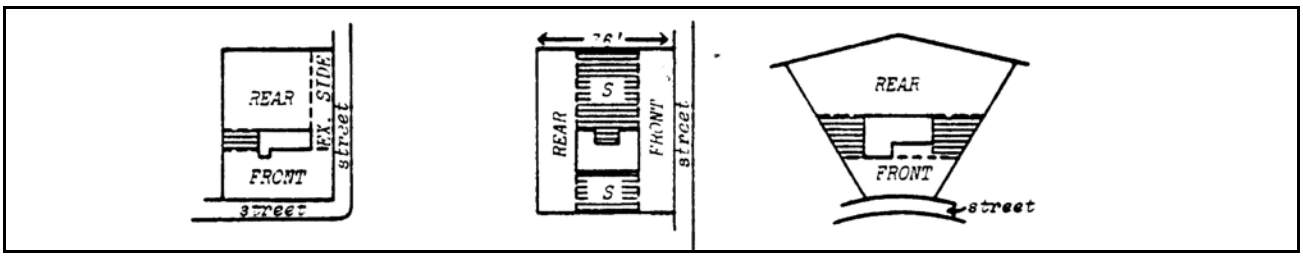

Figure 1.6-32 - Side Yard

Zone - Area of land within the Corvallis City limits designated for specific types of permitted developments and subject to the development requirements of that zone.

Zone Change - Amendment to the boundaries of zones shown on the Official Zoning Map. Procedures for this type of land use application are outlined in Sections 1.2.90.01 and 1.2.110.03 - Special Development, and Chapter 2.2 - Zone Changes.

Section 1.6.40 - SPECIFIC WORDS AND TERMS PARTICULAR TO THE 100-YEAR FLOODPLAIN REGULATIONS IN LDC CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT AND CHAPTER 4.5 - FLOODPLAIN PROVISIONS.

THE DEFINITIONS PROVIDED BELOW ONLY PERTAIN TO INSTANCES WHERE THE SUBJECT WORD OR TERM IS USED WITHIN THE CONTEXT OF 100-YEAR FLOODPLAIN REGULATIONS PRIMARILY PRESENTED IN LDC CHAPTER 4.5 - FLOODPLAIN PROVISIONS & LDC CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT. NOTE - WHERE DEFINED WORDS OR TERMS ARE USED WITHIN THE DEFINITIONS OF OTHER WORDS OR TERMS PROVIDED BELOW, THE DEFINITIONS FROM SECTION 1.6.40 APPLY	
Word or Term	**100-year Floodplain-Specific Definition**
Area of Shallow Flooding	A designated AO or AH Federal Flood Zone on a community's Flood Insurance Rate Map (FIRM) with base flood Depth Number(s) from one to three ft., and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Also includes additional areas that meet the FEMA definition for the AO or AH Federal Flood Zones, but which are located in areas not currently identified in the Flood Insurance Study for Benton County, Oregon and Incorporated Areas, dated June 2, 2011. Such additional areas must be identified in an independent study that is developed by the State of Oregon or a registered engineer and approved by the Floodplain Administrator or designee, in accordance with Section 4.5.50.03.p. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Area of Special Flood Hazard	See "Special Flood Hazard Area" in this Section 1.6.40.*[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Base Flood	Flood that has a one percent chance of being equaled or exceeded ~~ocurring~~ in any given year. Also commonly referred to as the 100-year Flood, the Base Flood has been adopted by the Federal Emergency Management Agency (FEMA) for Floodplain management purposes, and refers to a flood event that inundates the entire 100-year Floodplain. See Floodplain, 100-Year and Flood, 100-Year. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Base Flood Elevation	The water surface elevation during the Base Flood in relation to a specified Datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest 0.1 foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Administrator or designee is authorized through Sections 4.5.50.03.p and 4.5.60.01.b to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. *[Model Ordinance Section II - Definitions]*
Basement	The portion of a structure with its floor sub grade (below ground level) on all sides. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Below-grade Crawlspace	An enclosed area below the Base Flood Elevation in which the interior grade is not more than two ft. below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 ft. at any point. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Building Codes	The combined specialty codes adopted under ORS 446.062, 446.185, 447.020 (2), 455.020 (2), 455.496, 455.610, 455.680, 460.085, 460.360, 479.730 (1) or 480.545, but does not include regulations adopted by the State Fire Marshal pursuant to ORS chapter 476 or ORS 479.015 to 479.200 and 479.210 to 479.220. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Critical Facility	A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Section 4.5.110.09: **a.** Hospitals and other medical facilities having surgery and emergency treatment areas; **b.** Fire and police stations; **c.** Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities' **d.** Emergency vehicle shelters and garages; **e.** Structures and equipment in emergency-preparedness centers; **f.** Standby power generating equipment for essential facilities; **g.** Structures and equipment in government communication centers and other facilities required for emergency response; and [ORS 455.447] *[ORS 455.447 & Model Ordinance Section II - Definitions]* **h.** Other facilities as determined by the Floodplain Administrator or designee. Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities. The Taylor Water Treatment plant along the Willamette River is an example of such a facility. It is pulling water from the Willamette River. Because of this fact, these types of facilities have purposefully been excluded the list above.

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Word or Term	**100-year Floodplain-Specific Definition**
Depth Number	The depth of a Base Flood in a designated AO or AH Federal Flood Zone. These AO and AH Federal Flood Zones consist of an Area of Shallow Flooding and the Base Flood depths in those Areas of Shallow Flooding are the Depth Numbers. These Depth Numbers typically range from one to three ft. See "Area of Shallow Flooding" in Section 1.6.40.
Development	Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, fencing, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the Special Flood Hazard Area. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Digital Flood Insurance Rate Map	Depicts flood risk and Federal Flood Zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications. *[Model Ordinance Section II - Definitions]*
Elevated Building	A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns. *[Model Ordinance Section II - Definitions]*
Existing Building or Structure	A Structure for which the Start of Construction commenced before June 2, 2011. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*
Federal Emergency Management Agency (FEMA)	The agency with the overall responsibility for administering the National Flood Insurance Program. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**	
Federal Flood Zone	Federal Flood Zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk. These Federal Flood Zones are depicted on a community's Flood Insurance Rate Map (FIRM) or on Floodplain study maps approved by the Floodplain Administrator or designee. Each Federal Flood Zone reflects the severity or type of flooding in the area. *[FEMA website & Chapter 4.5 - Floodplain Provisions]*	
	a. **High Risk Areas -** These areas are all in the Special Flood Hazard Area (the 100-yr. Floodplain). In communities that participate in the National Flood Insurance Program (NFIP), mandatory flood insurance purchase requirements apply to all of these Federal Flood Zones. *[FEMA website]*	
	Federal Flood Zone	**Description**
	A	Areas with a one percent or greater chance of flooding in any given year and a 26 percent chance of flooding over the life of a 30-yr. mortgage. Because detailed analyses are not performed for such areas; no Depth Numbers or Base Flood Elevations are shown within areas with this Federal Flood Zone.*[FEMA website]*
	AE & A1-A30	The base Floodplain where Base Flood Elevations derived from detailed analyses are shown at selected intervals. Areas with a one percent or greater chance of flooding in any given year and a 26 percent chance of flooding over the life of a 30-yr. mortgage. The AE Federal Flood Zone is now used on the new format Flood Insurance Rate Maps (FIRMS) instead of the old format of A1 - A30 Federal Flood Zones.*[FEMA website and handouts]*
	AH	Areas with a one percent or greater chance of shallow flooding in any given year, usually in the form of a pond, with an average Depth Number ranging from one to three ft. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. Base Flood Elevations derived from detailed analyses are shown at selected intervals within areas with this Federal Flood Zone.*[FEMA website]*
	AO	River or stream flood hazard areas, and areas with a one percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average Depth Number ranging from one to three ft. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. Average flood Depth Numbers derived from detailed analyses are shown within areas with this Federal Flood Zone.*[FEMA website]*
	AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A Federal Flood Zones if the structure is built or restored in compliance with Federal Flood Zone AR Floodplain management regulations.*[FEMA website]*

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Word or Term	**100-year Floodplain-Specific Definition**	
Federal Flood Zone definition continued	A99	Areas with a one percent or greater chance of flooding in any given year that will be protected by a Federal flood control system where construction has reached specified legal requirements. No Depth Numbers or Base Flood Elevations are shown within areas with this Federal Flood Zone.*[FEMA website]*
	b. **Moderate to Low Risk Areas -** These areas are **outside of** the Special Flood Hazard Area. In communities that participate in the National Flood Insurance Program (NFIP), flood insurance is available to all property owners and renters in these Federal Flood Zones. *[FEMA website]*	
	Federal Flood Zone	**Description**
	B & X (Shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-yr. and 500-yr. floods. Federal Flood Zone B is also used to designate base floodplains of lesser hazards, such as areas protected by levees from the 100-yr. Flood, or shallow flooding areas with average Depth Numbers of less than one ft. or drainage areas less than one sq. mile. *[FEMA website]*
	C & X (Unshaded)	Area on minimal flood hazard, usually depicted on Flood Insurance Rate Maps (FIRMs) as above the 500-yr. flood level. Federal Flood Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base floodplain. Federal Flood Zone X is the area determined to be outside the 500-yr. flood and protected by levee from the 100-yr. Flood. *[FEMA website]*
	V	Coastal Areas with a one percent or greater chance of flooding in any given year and an additional hazard associated with storm waves. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. No Base Flood Elevations are shown within areas with this Federal Flood Zone *[FEMA website]*
	V & V1-30	Coastal Areas with a one percent or greater chance of flooding in any given year and an additional hazard associated with storm waves. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. Base Flood Elevations derived from detailed analyses are shown at selected intervals on areas in this Federal Flood Zone. *[FEMA website]*
	c. **Undetermined Risk Areas -** *[FEMA website]*	
	Federal Flood Zone	**Description**
	D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk. *[FEMA website]*

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Word or Term	**100-year Floodplain-Specific Definition**
Flood or flooding	A general and temporary condition of partial or complete inundation of normally dry land areas from: (a) the overflow of inland or tidal waters; or (b) the unusual and rapid accumulation or runoff of surface waters from any source. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Flood Insurance Rate Map (FIRM)	An official map ~~on which~~ of a community, issued by the Federal Insurance Administration, ~~has delineated~~ delineating the ~~areas of~~ S~~s~~pecial F~~f~~lood H~~h~~azard~~s~~ Areas and/or ~~the~~ risk premium Federal Flood Zones applicable to ~~portions of~~ the community. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Flood Insurance Study (FIS)	The official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles, floodway boundaries and water surface elevations of the Base Flood. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*
Flood, 100-year	Flood with a one percent chance of being equaled or exceeded ~~occurring~~ in any given year. This is the flood most commonly used for regulatory purposes and is called the Base Flood. As shown below in Figure 1.6-16 - Floodplain Cross Section, this flood event inundates the entire 100-year Floodplain. See Base Flood. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*
Floodplain	As shown below in Figure 1.6-16 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*
Floodplain Development Permit	Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Chapter 2.11 - Floodplain Development Permit. *[44 CFR 60.3(a) & Model Ordinance Section III-D]*

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Word or Term	**100-year Floodplain-Specific Definition**
Floodplain Functions	Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.*[Current Code]*

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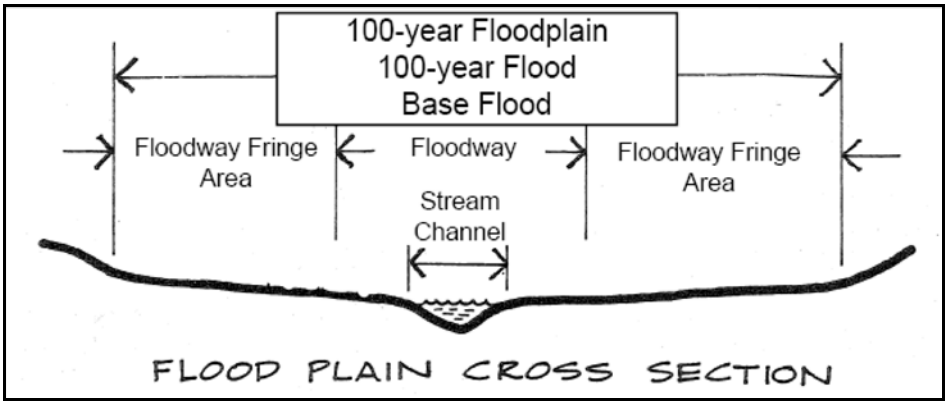
Word or Term	**100-year Floodplain-Specific Definition**
Floodplain, 100-year	As shown below in Figure 1.6-16 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Administrator or designee is authorized through Sections 4.5.50.03.p and 4.5.60.01.b to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood ~~and 100-year Flood~~.*[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*  Figure 1.6-16 - Floodplain Cross Section

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Word or Term	**100-year Floodplain-Specific Definition**
Floodway (Regulatory Floodway)	The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge and store the floodwater or flood flows associated with the regulatory flood.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]* **a.** **Floodway, 0.2-ft.** - As shown above ~~below~~ in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the W~~w~~ater S~~s~~urface E~~e~~levation more than 0.2 ft. The Regulatory Floodway for the City of Corvallis is the 0.2-ft. Floodway. **b.** **Floodway, 1.0-ft.** - As shown above ~~below~~ in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the W~~w~~ater S~~s~~urface E~~e~~levation more than 1.0 ft. The Federal Emergency Management Agency (FEMA) identifies the Regulatory Floodway as the 1.0-ft. Floodway, but also recognizes the City of Corvallis 0.2-ft. Floodway as the Regulatory Floodway for the City of Corvallis. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Floodway Fringe	As shown in Figure 1.6-16 - Floodplain Cross Section, the area of the 100-year Floodplain lying outside of the Floodway. Context is the 0.2-ft. Floodway, unless specifically identified as the 1.0-ft. Floodway. See Floodway (Regulatory Floodway)~~, 0.2-ft. and Floodway, 1.0-ft~~. *[Current Code]*
Flow-through Design	Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of ~~or displace~~ surface floodwater.*[Current Code, just moved]*
Highest Adjacent Grade (HAG)	The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Historic Structure	A structure that is: **a.** Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; **b.** Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district; **c.** Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; **d.** Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either: 1. By an approved state program as determined by the Secretary of the Interior, or; 2. Directly by the Secretary of the Interior in states without approved programs.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Hydrodynamic Load	Force of water in motion. *[Current Code - just moved]*
Hydrostatic Load	Force of water at rest. *[Current Code - just moved]*
Lateral Addition	An addition that requires a foundation to be built outside of the foundation footprint of the existing building. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Letter of Map Change (LOMC)	An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories: **a.** **Letter of Map Amendment (LOMA)** - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area. **b.** **Letter of Map Revision (LOMR)** - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area. **c.** **Conditional Letter of Map Revision (CLOMR)** - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies. *[Model Ordinance Section II - Definitions]*

THE DEFINITIONS PROVIDED BELOW ONLY PERTAIN TO INSTANCES WHERE THE SUBJECT WORD OR TERM IS USED WITHIN THE CONTEXT OF 100-YEAR FLOODPLAIN REGULATIONS PRIMARILY PRESENTED IN LDC CHAPTER 4.5 - FLOODPLAIN PROVISIONS & LDC CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT. NOTE - WHERE DEFINED WORDS OR TERMS ARE USED WITHIN THE DEFINITIONS OF OTHER WORDS OR TERMS PROVIDED BELOW, THE DEFINITIONS FROM SECTION 1.6.40 APPLY	
Word or Term	**100-year Floodplain-Specific Definition**
Lowest Floor	Lowest Floor is defined as follows: **a.** **Lowest Floor of Buildings and Structures Other Than Manufactured Dwellings -** The Lowest F~~f~~loor of buildings and structures other than manufactured dwellings is the lowest enclosed area ~~in a building,~~(including ~~a~~ basement). An unfinished or flood-resistant enclosure used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a structure's Lowest Floor, provided that the enclosed area is built and maintained in accordance with the applicable design requirements of the state Building Code. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]* **b.** **Lowest Floor of Manufactured Dwellings -** The Lowest Floor of a manufactured dwelling is the bottom of the longitudinal chassis frame beam.*[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*
Mean Sea Level	For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced. *[44 CFR 59.1, modified to add new datum, & Model Ordinance Section II - Definitions]*
New Construction	A Structure for which the Start of Construction commenced after June 2, 2011, and includes subsequent Substantial Improvements to the Structure. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*
Shallow Flooding, Area of	See "Area of Shallow Flooding" in this Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Special Flood Hazard Area	The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Federal Flood Zone designations on FIRMs include the letters A or V. Also known as the Special Flood Hazard Area (SFHA). See also "Floodplain, 100-year." *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Special Occupancy Structure	The following are Special Occupancy Structures: **a.** Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons; **b.** Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers; **c.** Buildings for colleges or adult education schools with a capacity greater than 500 persons; **d.** Medical facilities with 50 or more resident, incapacitated patients not included in subparagraphs “a” to “c,” above; **e.** Jails and detention facilities; and **f.** All structures and occupancies with a capacity greater than 5,000 persons. *[ORS 455.447 & Model Ordinance Section II - Definitions]*
Start of Construction	Includes Substantial Improvement and means the date the Building Permit was issued, provided the actual Start of Construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a Substantial Improvement, the actual Start of Construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the alteration affects the external dimensions of a building. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

THE DEFINITIONS PROVIDED BELOW ONLY PERTAIN TO INSTANCES WHERE THE SUBJECT WORD OR TERM IS USED WITHIN THE CONTEXT OF 100-YEAR FLOODPLAIN REGULATIONS PRIMARILY PRESENTED IN LDC CHAPTER 4.5 - FLOODPLAIN PROVISIONS & LDC CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT. NOTE - WHERE DEFINED WORDS OR TERMS ARE USED WITHIN THE DEFINITIONS OF OTHER WORDS OR TERMS PROVIDED BELOW, THE DEFINITIONS FROM SECTION 1.6.40 APPLY	
Word or Term	**100-year Floodplain-Specific Definition**
Structure	A walled and roofed building, a manufactured dwelling, a modular or temporary building, or a gas or liquid storage tank that is principally above ground. *[44 CFR 59.1, modified for clarify & Model Ordinance Section II - Definitions]*
Substantial Damage	Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed 50 percent of the structure's market value before the damage occurred. ~~Substantial Damage also pertains to flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the structure's market value before the damage occurred. Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, substantial improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft.-Floodway.~~ *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Substantial Improvement	See "Substantial Improvement" in main list of definitions for this Chapter 1.6 - Definitions.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Water Surface Elevation	See "Water Surface Elevation" in main list of definitions for this Chapter 1.6 - Definitions. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

EXCERPT

CHAPTER 2.0
PUBLIC HEARINGS

Section 2.0.10 - BACKGROUND

The following procedures establish the conduct of legislative and quasi-judicial public hearings required by the provisions of this Code. Where this Code and a provision of state law address the same subject, the requirement of state law shall take precedence.

Section 2.0.20 - PURPOSES

a. Describe rules of conduct, notice requirements, order of proceedings, and action required for legislative and quasi-judicial hearings; and

b. Provide clear and consistent rules to ensure that the legal rights of individual property owners and the general public are protected.

Section 2.0.30 - DETERMINATION OF HEARING TYPE

Within seven days from the date of the Director's request for a hearing, the City Attorney shall determine whether a legislative or a quasi-judicial hearing is required. The decision shall be based upon consideration of applicable state regulations and relevant court decisions.

Section 2.0.40 - LEGISLATIVE HEARINGS

2.0.40.01 - Notice

a. **Notice Published in Newspaper** - Notice of the hearing shall be published in a newspaper of general circulation at least 10 days prior to the hearing and shall contain the following information:

1. Terms of, or a statement of, the proposed public action;

2. Department of the City from which additional information can be obtained; and

3. Time, place, date, and methods for presentation of views by interested persons.

e) Planned Developments, including:

1) Conceptual and/or Detailed Development Plans;

2) Major Planned Development Modifications; and

3) Planned Development Nullifications per Section 2.5.80.b:

f) Refinement Plans and Refinement Plan Nullifications;

g) HRC-level Historic Preservation Permits related to Demolitions; ~~and~~

h) Major Neighborhood Center Master Site Plans, including:

1) Master Site Plans; and

2) Major Master Site Plan Modifications~~.~~;

i) Major Lot Development Options; and

j) Floodplain Development Permit Variances.

3. Any person who resides on or owns property within 100 ft., including street right-of-way, of a parcel of land proposed for:

a) Appeals of a General Development decision of the Director;

b) Establishing or removing a Historic Preservation Overlay zoning designation, in accordance with Chapter 2.2 - Zone Changes, including appeals of Administrative Zone Changes;

c) HRC-level Historic Preservation Permits, except those covered by "2.g," above;

d) Minor Planned Development Modifications;

e) Expedited Land Divisions;

f) Major Neighborhood Center Minor Site Plan Modifications;

CHAPTER 2.1
COMPREHENSIVE PLAN AMENDMENT PROCEDURES

Section 2.1.10 - BACKGROUND

The adopted Comprehensive Plan is the City's official statement of major policies concerning desired future development of the community. The Comprehensive Plan is the controlling land use planning instrument for the City and, as such, land development regulations and related actions are required to conform with the Plan.

This chapter pertains to lands within the City limits. Those portions of the Comprehensive Plan that apply to areas outside the City limits but within the Urban Growth Boundary shall be amended in accordance with the provisions of the Corvallis Urban Fringe Management Agreement.

Section 2.1.20 - PURPOSES

This Chapter describes the review criteria and procedural requirements to accomplish the following:

a. Respond to changing conditions and community attitudes;

b. Ensure flexibility while maintaining the integrity of the Comprehensive Plan; and

c. Establish procedures by which the Plan text and map may be amended.

Section 2.1.30 - PROCEDURES

2.1.30.01 - Initiation

Comprehensive Plan Amendments shall be initiated by one of the following:

a. An application submitted by the property owners or their authorized agents; or

b. A majority vote of the City Council. City Council initiation of Comprehensive Plan Map Amendments shall be considered to accomplish the following:

1. Respond to changed circumstances;

2. Correct inconsistencies with state goals;

3. Accomplish legislative changes affecting a relatively large number of properties or community-wide issues;

4. Correct inconsistencies between the Comprehensive Plan Map and other policies and maps;

5. Respond to changes in property boundaries; and/or

6. Respond to changes as a result of neighborhood or area-specific master planning efforts.

2.1.30.02 - Frequency of Plan Amendments

Applications for Comprehensive Plan Amendments initiated by property owners shall be reviewed semi-annually in March and September by the Planning Commission. The City Council may initiate amendments to the Comprehensive Plan at any time. Applications for Comprehensive Plan Amendments filed in conjunction with an application for Annexation shall be reviewed concurrently. Comprehensive Plan Amendments are exempt from the time limits established in state law for development review processes and shall be exempt from time restrictions set forth in this Code.

2.1.30.03 - Application Requirements

Notice shall be provided to the Land Conservation and Development Commission (LCDC) of any proposed amendment or new regulation as provided by state law.

When the Director deems any requirement below unnecessary for the proper evaluation of a proposed application, it may be waived.

Prior to formal submittal of an application, the applicant is encouraged to participate in an informal pre-application conference with Community Development Department staff to discuss the proposal, the applicant's requirements, and the applicant's materials developed in response to this Code's applicable requirements.

Applications for Comprehensive Plan Amendments shall be made on forms provided by the Director and shall be accompanied by:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set

of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. Fifteen copies of the narrative, on 8.5- by 11-in. sheets, and 15 copies of graphics at an 8.5- by 11-in. size. The Director may request additional copies of the narrative and/or graphics for routing purposes, if needed. Related names/numbers must be legible on the graphics. The Director may also require some or all graphics at an 11- by 17-in. size if, for legibility purposes, such a size would be helpful;

d. For Comprehensive Plan Map Amendments, six sets of full-scaled black line or blueprint drawings of the graphic(s), with sheet size not to exceed 24- by 36-in. Where necessary, an overall plan with additional detail sheets may be submitted;

e. For Comprehensive Plan Text Amendments, the proposed text changes;

f. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable;

g. Graphic Requirements

Graphics shall include the following information where applicable:

1. Public Notice Map - Typically a street map at one in. = 800 ft. as per the City's public notice format;

2. Zoning Maps - Existing and proposed Zoning Maps. Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

3. Comprehensive Plan Maps - Existing and proposed Comprehensive Plan Maps. Typically one in. = 800 ft. with a key that identifies each

land use designation on the site and within 1,000 ft. of the site as per City format;

4. Existing Land Use Map - Typically a topographic map that extends at least a 1,000 ft. beyond the site. The map shall include building footprints and distinguishes between single-family, multi-family, Commercial, and Industrial Uses, as well as other significant features such as roads, parks, schools, and significant natural features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - ~~Floodplain~~~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

5. Significant Natural Features Map(s) - Maps shall identify significant natural features of the site, including but not limited to:

   a) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

   b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

   c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

6. For Comprehensive Plan Map Amendments, a legible vicinity map identifying the area to be amended and identifying adjacent City and County territory at least 300 ft. beyond the boundaries of the subject

site. The map shall include features such as existing streets and parcel boundaries; existing structures; driveways; utilities; significant natural features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed Map Amendment. The Director may require that an applicant's graphics include information on lands in excess of 300 ft. from the subject site, such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site.

h. Statement of availability, capacity, and status of existing water, sewer, storm drainage, transportation, park, and school facilities. The applicant shall obtain this information using GIS base maps where available;

i. Statement of increased demand for the facilities that will be generated by the proposed change in land use designation. The applicant shall refer to the criteria of the City's facility master plans, available via the City Engineer, to determine the methodology used to estimate public facility demands. Information related to an actual development proposal may be included for informational purposes. At minimum, the demand calculations associated with the full range of development potential (min. to max.) under current vs. proposed land use designations shall be addressed in the analysis;

j. Statement of additional facilities required to meet the increased demand and phasing of such facilities in accordance with projected demand. The applicant shall review adopted public facility plans, master plans, and capital improvement programs, and state whether additional facilities are planned or programmed for the subject area. Information related to an actual development proposal may be included for informational purposes. At minimum, the demand calculations associated with the full range of development potential (min. to max.) under current vs. proposed land uses designations shall be addressed in the analysis;

k. Traffic impact study, if required by the City Engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures.

Information related to an actual development proposal may be included for informational purposes. At minimum, the traffic calculations associated with the full range of development potential (min. to max.) under current vs. proposed land uses designations shall be addressed in the analysis. Also see Section 4.0.60.a;

l. Statement outlining the method and source of financing required to provide additional facilities; and

m. Statement of the reasons for the change, and how the proposal meets the review criteria in Section 2.1.30.06 or 2.1.30.07, whichever is applicable.

2.1.30.04 - Acceptance of Application

a. The Director shall review the application in accordance with Chapter 2.0 - Public Hearings.

b. After accepting a complete application, the Director shall schedule a public hearing to be held by the Planning Commission. Notice of the hearing shall be provided in accordance with Chapter 2.0 - Public Hearings.

c. After an application is accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.1.30.05 - Staff Evaluation

The Director shall prepare a report that evaluates whether the proposal complies with the review criteria below. The report shall include a recommendation for approval or denial.

2.1.30.06 - Review Criteria for the Majority of Comprehensive Plan Amendments

a. This Section addresses review criteria for the following:

1. Text Amendments to the Comprehensive Plan; and

2. Amendments to the Comprehensive Plan Map that do **not** involve a Map Amendment to Open Space-Conservation or Public Institutional,

when such a Map Amendment is required as part of an Annexation request per Chapter 2.6 - Annexations.

Comprehensive Plan Amendments shall be reviewed to ensure consistency with the purposes of this Chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City Council.

b. Amendments shall be approved only when the following findings are made:

1. There is a demonstrated public need for the change;

2. The advantages to the community resulting from the change outweigh the disadvantages; and

3. The change proposed is a desirable means of meeting the public need.

c. Proposed amendments to the Comprehensive Plan Map shall demonstrate compatibility in the following areas, as applicable:

1. Basic site design (e.g., the organization of Uses on a site and the Uses' relationships to neighboring properties);

2. Visual elements (scale, structural design and form, materials, etc.);

3. Noise attenuation;

4. Odors and emissions;

5. Lighting;

6. Signage;

7. Landscaping for buffering and screening;

8. Transportation facilities;

9. Traffic and off-site parking impacts;

10. Utility infrastructure;

11. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

12. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards;

13. Preservation and/or protection of significant natural features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

2.1.30.07- Review Criteria for Remainder of Comprehensive Plan Amendments

a. This Section addresses review criteria for Comprehensive Plan Map Amendments that involve a Map Amendment to Open Space-Conservation or Public Institutional, when such a Map Amendment is required as part of an Annexation request per Chapter 2.6 - Annexations.

This type of a Comprehensive Plan Map Amendment shall be reviewed to ensure consistency with the purposes of this Chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City Council.

b. Amendments shall be approved only when the following findings are made:

1. The proposed Comprehensive Plan Map Amendment is part of an Annexation proposal; and

2. The Annexation proposal includes areas planned for open space, general community use, or public or semi-public ownerships; and the proposed Comprehensive Plan Map Amendment to Open Space-Conservation or Public Institutional pertains to these lands, as follows:

   a) Areas planned for open spaces or future general community use, including planned parks, preserves, and general

drainageway corridors, shall be redesignated on the Comprehensive Plan Map as Open Space-Conservation.

b) Existing, proposed, or planned areas of public or semi-public ownership, such as Oregon State University facilities or lands, school sites, City reservoirs, and portions of the Corvallis Municipal Airport, shall be redesignated on the Comprehensive Plan Map as Public Institutional.

c. Proposed amendments to the Comprehensive Plan Map shall demonstrate compatibility in the following areas, as applicable:

1. Basic site design (e.g., the organization of Uses on a site and the Uses' relationships to neighboring properties);

2. Visual elements (scale, structural design and form, materials, etc.);

3. Noise attenuation;

4. Odors and emissions;

5. Lighting;

6. Signage;

7. Landscaping for buffering and screening;

8. Transportation facilities;

9. Traffic and off-site parking impacts;

10. Utility infrastructure;

11. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

12. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards;

13. Preservation and/or protection of significant natural features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting,

Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

2.1.30.08 - Action by the Planning Commission

The Planning Commission shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the public hearing, the Commission shall make a recommendation to the City Council concerning the proposed Comprehensive Plan Amendment. The Commission's recommendations shall include findings that specify how the proposal has or has not complied with the above review criteria.

2.1.30.09 - Action by the City Council

Upon receipt of the Planning Commission's recommendation, the City Council shall set a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the public hearing, the City Council shall either deny the application or adopt an ordinance approving the proposed Comprehensive Plan Amendment or a modification thereof. The City Council's decision shall include findings that specify how the proposal has or has not complied with the above review criteria.

2.1.30.10 - Notice of Disposition

The Director shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings, that includes a written statement of the City Council's decision, a reference to findings leading to it, and the appeal period deadline. A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing.

2.1.30.11 - Map Errors

If the City Council approves a Comprehensive Plan Map Amendment, but the Director discovers that the Comprehensive Plan Map was not altered to accurately reflect the Amendment, the Director shall correct the Comprehensive Plan Map to comply with the amendment without any additional public review.

The Map Amendment shall not be corrected if the City Council subsequently approves a Comprehensive Plan Map Amendment affecting the initial approval.

Map corrections made by the Director shall be reported to the Council and the owner of the property receiving the correction by noting the correction as a consent item on a Council agenda following the correction, and by mailing the property owner notification of the correction.

CHAPTER 2.2
ZONE CHANGES

Section 2.2.10 - BACKGROUND

The Official Zoning Map is consistent with the adopted Comprehensive Plan, as amended, and as such is a reflection of the City's land use planning goals. The map has also been adopted as part of this Code. Frequent and piecemeal amendments to the Official Zoning Map can threaten the integrity of the Comprehensive Plan and the likelihood of its successful implementation. Nevertheless, it may be necessary to amend the Official Zoning Map from time to time to correct errors or to respond to changing conditions or unforseen circumstances, or to provide an incentive for the protection of Natural Resources and Natural Hazards.

When a zone is amended, there often must be a corresponding change to the Comprehensive Plan Map. There are, however, instances where more than one zone corresponds to a site's Comprehensive Plan designation. In these situations, the zone can be amended without a Comprehensive Plan Map Amendment. Table 2.2-1 - Comprehensive Plan and Corresponding Zoning Map Designations, below illustrates the relationship between the Comprehensive Plan and the Official Zoning Map designations in the City.

Zone Changes are classified as legislative or quasi-judicial, depending on the number of properties involved. While only the City Council makes legislative decisions regarding Zone Changes, quasi-judicial decisions may be made by the:

a. Community Development Director in the case of Administrative Zone Changes to:

1. Remove a Historic Preservation Overlay in cases where a public hearing is not required. See Section 2.2.50;

2. Apply a Conservation - Open Space Zone on lands that already have a Natural Resource or Natural Hazards Overlay. See Section 2.2.50; and

3. Remove a residential Planned Development Overlay as mandated by the state. See Section 2.2.50.

b. Planning Commission;

c. Land Development Hearings Board;

b) Zoning Maps - Existing and proposed Zoning Maps. Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

c) Comprehensive Plan Map - Typically one in. = 800 ft. with a key that identifies each land use designation on the site and within 1,000 ft. of the site as per City format;

d) Existing Land Use Map - Typically a topographic map that extends at least a 1,000 ft. beyond the site. The map shall include building footprints and distinguish between single-family, multi-family, Commercial, and Industrial uses, as well as other significant features such as roads, parks, schools, and significant natural features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

e) Significant Natural Features Map(s) - Maps shall identify significant natural features of the site, including but not limited to:

1) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, as applicable, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

2) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that

the City can route the application to the appropriate state and federal agencies for comment; and

3) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

7. A legible vicinity map identifying the area to be amended and identifying adjacent City and County territory at least 300 ft. beyond the boundaries of the subject site. The map shall include features such as existing streets and parcel boundaries; existing structures; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed Zone Change. The Director may require that an applicant's graphics include information on lands in excess of 300 ft. from the subject site, such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site.

8. Statement of availability, capacity, and status of existing water, sewer, storm drainage, transportation, park , and school facilities. The applicant shall obtain this information using GIS base maps where available;

9. Statement of increased demand for the facilities that will be generated by the proposed change in land use designation. The applicant shall refer to the criteria of the City's facility master plans, available via the City Engineer, to determine the methodology used to estimate public facility demands. Information related to an actual development proposal may be included for informational purposes. At minimum, the demand calculations associated with the full range of development potential (min. to max.) under current vs. proposed land uses designations shall be addressed in the analysis;

10. Statement of additional facilities required to meet the increased demand and phasing of such facilities in accordance with projected

2. The Land Development Hearings Board, if no Comprehensive Plan Amendment is required to approve the Zone Change and the application is not a request to apply or remove a Historic Preservation Overlay;

3. The Historic Resources Commission, if the request is to apply or remove a Historic Preservation Overlay and does not meet the definition for an Administrative Zone Change outlined in Section 2.2.50.b.

c. After an application is accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.2.40.04 - Staff Evaluation

The Director shall prepare a report that evaluates whether the proposal complies with the review criteria below. The report shall also include a recommendation for approval or denial.

2.2.40.05 - Review Criteria

a. Review Criteria for Zone Changes, Except Those Requesting to Apply or Remove a Historic Preservation Overlay

Quasi-judicial Zone Changes shall be reviewed to determine how they affect City facilities and services, and to ensure consistency with the purposes of this Chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City Council. The application shall demonstrate compatibility in the following areas, as applicable:

1. Basic site design (e.g., the organization of uses on a site and the uses' relationships to neighboring properties);

2. Visual elements (scale, structural design and form, materials, etc.);

3. Noise attenuation;

4. Odors and emissions;

5. Lighting;

6. Signage;

7. Landscaping for buffering and screening;

8. Transportation facilities;

9. Traffic and off-site parking impacts;

10. Utility infrastructure;

11. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

12. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards;

13. Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

b. Review Criteria for Zone Changes to Apply a Historic Preservation Overlay

1. Historic Integrity of setting, location, materials or workmanship -

To meet this criteria, the applicant shall demonstrate that the application fulfills at least two of the following criteria:

a) The historic resource is in its original location or is in the location in which it made a historical contribution;

b) The historic resource remains essentially as originally constructed;

CHAPTER 2.3
CONDITIONAL DEVELOPMENT

Section 2.3.10 - BACKGROUND

Certain Use Types listed in each zone require a public hearing to determine how they affect surrounding properties, neighborhoods, and the community as a whole. The Conditional Development review process provides an opportunity to allow a Use when potential adverse effects can be mitigated, or deny a Use if concerns cannot be resolved to the satisfaction of the hearing authority. It is the intent of this Chapter to permit Conditional Developments and Conditional Development Modifications consistent with the Comprehensive Plan, subject to procedures and criteria intended to mitigate potentially negative impacts.

Section 2.3.20 - PURPOSES

Procedures and review criteria for Conditional Developments are established for the following purposes:

a. Permit certain types of public and private development that provide a community service in locations related to their service areas;

b. Permit commercial development in locations related to its service area;

c. Ensure that Conditional Development is compatible with its immediate area and the affected part of the community;

d. Permit Uses when potentially adverse effects can be mitigated; and

e. Permit a mixture of residential development types.

Section 2.3.30 - CONDITIONAL DEVELOPMENT PROCEDURES

When an application is filed for a Conditional Development or a Conditional Development Modification, it shall be reviewed in accordance with the following procedures.

2.3.30.01 - Application Requirements

When the Director deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived.

Prior to formal submittal of an application, the applicant is encouraged to participate in an informal pre-application conference with Community Development Department staff to discuss the proposal, the applicant's requirements, and the applicant's materials developed in response to this Code's applicable requirements.

Applications shall be made on forms provided by the Director and shall be accompanied by:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. Fifteen copies of the narrative, on 8.5- by 11-in. sheets, and 15 copies of graphics at an 8.5- by 11-in. size. The Director may request additional copies of the narrative and/or graphics for routing purposes, if needed. Related names/numbers must be legible on the graphics. The Director may also require some or all graphics at an 11- by 17-in. size if, for legibility purposes, such a size would be helpful;

d. Six sets of full-scaled black line or blueprint drawings of the graphic(s), with sheet size not to exceed 24- by 36-in. Where necessary, an overall plan with additional detail sheets may be submitted;

e. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable;

f. Graphic Requirements

Graphics shall include the following information where applicable:

1. Public Notice Map - Typically a street map at one in. = 800 ft. as per the City's public notice format;

2. Zoning Map - Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

3. Comprehensive Plan Map - Typically one in. = 800 ft. with a key that identifies each land use designation on the site and within 1,000 ft. of the site as per City format;

4. Existing Land Use Map - Typically a topographic map that extends at least 1,000 ft. beyond the site. The map shall include building footprints and distinguish between single-family, multi-family, Commercial, and Industrial Uses, as well as other significant features such as roads, parks, schools, and Significant Natural Features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

5. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, including but not limited to:

   a) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

6. Site Plan(s) and Other Graphics -

a) Site plan(s) and other graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and contain the information listed in this Section and "b," below.

Graphics shall include features within a minimum 150-ft. radius of the site, such as existing streets and parcel boundaries; existing structures; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed development. The Director may require that an applicant's graphics include information on lands in excess of 150 ft. from a development site, such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site.

b) The site plan and related graphics shall also include:

1) Boundary of the proposed development site and any interior boundaries related to proposed development phases or land divisions;

2) Number of lots and their dimensions, including frontage, depth, and area in sq. ft.;

3) Location and floor area of existing and proposed structures and other improvements, including maximum heights, Building Types, and gross density per acre for residential developments; location of fire hydrants, overhead lines in the abutting right of way, easements, fences, walls, parking calculations, and walkways; and any proposed Use restrictions. Where required by the applicable zone, Lot Coverage and Green Area calculations shall be provided;

4) Location and dimensions of all areas to be conveyed, dedicated, or reserved as common open spaces, common Green Area, public parks, recreational areas, school sites, and similar public and semi-public uses;

5) Existing and proposed circulation system plan and dimensions including streets, driveways, bikeways, sidewalks, multi-use paths, off-street parking areas, service areas (including refuse), loading areas, direction of traffic flow, and major points of access to public rights-of-way. Illustrative cross-sections of streets shall be provided. Notations of proposed ownership (public or private) should be included where appropriate;

6) Existing and proposed general pedestrian circulation system, including its interrelationship and connectivity with the existing and proposed vehicular, bicycle, and pedestrian circulation systems, and indicating proposed treatments for points of conflict;

7) Detailed utilities plan indicating existing and proposed utility systems and their function, including sanitary sewer, storm sewer, and drainage and water systems;

8) Identification of Significant Natural Features that were included on the Significant Natural Features map(s) required in “5," above, to indicate the relationship of the proposal to the site’s Significant Natural Features;

9) Existing and proposed topographic contours at two-ft. intervals. Where the grade of any part of the development site exceeds 10 percent and where the development site abuts existing developed lots, a conceptual grading plan shall be required. The grading plan shall contain adequate information to evaluate impacts to the site and adjacent areas, consistent with Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions. If a grading plan is required, it shall indicate how these objectives are met, how runoff or surface water from the development will be managed, and how the development's surface waters will be disposed;

10) Conceptual landscape plan drawn to scale and showing the location of existing trees and vegetation proposed to be removed from or to be retained on the site, the location and conceptual design for landscaped areas - types of plant materials as basic as trees, shrubs, and groundcover/lawn areas - and other conceptual landscape features including walls and fences;

11) Exterior lighting plan indicating the location, size, height, typical design, material, color, method, and direction of illumination; and

12) Typical elevations and floor plans of buildings and structures sufficient to indicate the architectural intent and character of the proposed development, indicate the entrance and exit points, and permit computations of parking, design, and yard requirements. The elevations shall specify building materials to be used, specifications as to type, color, and texture of proposed exterior surfaces, and information demonstrating compliance with Chapter 4.10 - Pedestrian Oriented Design Standards;

g. Narrative Requirements

A written statement shall include the following information:

1. Statement of the planning objectives to be achieved by the proposed

development. This statement shall include a description of the proposed development, the rationale behind the assumptions and choices made, and a discussion of how the application meets the review criteria in Section 2.3.30.04 below, including the development standards required by this Code;

2. Quantitative data for the following, where appropriate:

   a) Total number and type of dwelling units;

   b) Square footages of all structures;

   c) Parcel size;

   d) Proposed Lot Coverage of buildings and structures, where known;

   e) Gross densities per acre;

   f) Total square footage of Green Area;

   g) Total number of parking spaces (compact, standard, handicapped, bicycle) and a breakdown of how parking is consistent with this Code's requirements; and

   h) Total square footage of nonresidential construction;

3. Detailed statement outlining timing, responsibilities, and financial assurances for all public and non-public improvements such as irrigation, private roads and drives, landscape, and maintenance;

4. Statement describing phases of project, if proposed. Phases shall be:

   a) Substantially and functionally self-contained and self-sustaining with regard to access, parking, utilities, Green Areas, and similar physical features; and capable of substantial occupancy, operation, and maintenance upon completion of construction and development;

   b) Arranged to avoid conflicts between higher and lower density development;

c) Properly related to other services of the community as a whole and to those facilities and services yet to be provided; and

d) Provided with such temporary or permanent transitional features, buffers, or protective areas as may be required to

prevent damage or detriment to any completed phases and to adjoining properties not in the Conditional Development.

5. Traffic impact study, if required by the City Engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures. See Section 4.0.60.a;

6. Statement addressing compatibility of proposed development with adjacent land uses relating to such items as architectural character, Building Type, and height of proposed structures; and

7. Proposals for setbacks or building envelopes, lot areas where land division is anticipated, and number of parking spaces to be provided per gross floor area or per number of units.

8. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable.

2.3.30.02 - Acceptance of Application

a. The Director shall review the application in accordance with Chapter 2.0 - Public Hearings.

b. After accepting a complete application, the Director shall schedule a public hearing to be held by the Planning Commission. Notice of the hearing shall be provided in accordance with Chapter 2.0 - Public Hearings.

c. After an application is accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.3.30.03 - Staff Evaluation

The Director shall prepare a report that evaluates whether the proposal complies with the review criteria below. The report shall include a recommendation for approval or denial and, if needed, a list of conditions for the Planning Commission to consider if an approval is granted.

2.3.30.04 - Review Criteria

Requests for Conditional Developments shall be reviewed to ensure consistency with the purposes of this Chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City Council. The application shall demonstrate compatibility in the following areas, as applicable:

a. Basic site design (the organization of Uses on a site and the Uses' relationships to neighboring properties);

b. Visual elements (scale, structural design and form, materials, etc.);

c. Noise attenuation;

d. Odors and emissions;

e. Lighting;

f. Signage;

g. Landscaping for buffering and screening;

h. Transportation facilities;

i. Traffic and off-site parking impacts;

j. Utility infrastructure;

k. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

l. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards; and

m. Preservation and/or protection of Significant Natural Features, consistent

with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

Any Conditional Development request on residentially designated property shall also result in a clear and objective set of development standards, between the Conditional Development proposal, required adherence to this Code, and Conditions of Approval.

2.3.30.05 - Action by the Planning Commission

The Planning Commission shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the public hearing, the Commission shall approve, conditionally approve, or deny the Conditional Development. The Commission's decision shall include findings that specify how the application has or has not complied with the above review criteria.

2.3.30.06 - Notice of Disposition

The Director shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings that includes a written statement of the Planning Commission's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing. For development on property with a Willamette River Greenway Overlay Zone, a Notice of Disposition shall also be mailed to the Oregon Department of Parks and Recreation.

2.3.30.07 - Appeals

The decision of the Planning Commission may be appealed in accordance with Chapter 2.19 - Appeals.

CHAPTER 2.4
SUBDIVISIONS AND MAJOR REPLATS

Section 2.4.10 - BACKGROUND

The division of land is the first step toward establishing a community's ultimate development pattern. Land Divisions can occur through either a Subdivision or a Partition procedure. A *Subdivision procedure* is used when four or more units (generally called lots) of land are created in a calendar year. Residential Subdivision applications are reviewed by the Director and do not go through a public hearing, except upon appeal. Nonresidential Subdivision applications are reviewed by the Planning Commission. For the purposes of this Chapter, Residential Subdivisions are those involving lands with a Zoning Designation of RS-1, RS-3.5, RS-5, RS-6, RS-9, RS-9(U), RS-12, RS-12(U), RS-20, and MUR. Nonresidential Subdivisions are those with a Zoning Designation other than those for Residential Subdivisions. Subdivision applications may include requests for Planned Developments to permit greater flexibility in design. Procedural provisions for Planned Developments are addressed in Chapter 2.5 - Planned Development.

A *Partition procedure* is used when three or fewer units (generally called parcels) are created in a calendar year. Partitions may or may not involve creation of a street. Partition applications are reviewed by the Director and do not go through a public hearing, except upon appeal. Partitions, in addition to procedures for Minor Replats and Property Line Adjustments, are addressed in Chapter 2.14 - Partitions, Minor Replats, and Property Line Adjustments.

This Chapter presents the review process and plat requirements for Subdivisions. Chapter 4.4 - Land Division Standards discusses lot and street design requirements and therefore must be reviewed in conjunction with this Chapter in creating and developing a Subdivision.

Section 2.4.20 - PURPOSES

Land Division review procedures are established in this Chapter for the following purposes:

a. Ensure that building sites are of sufficient size and appropriate design for their intended uses and that lots to be created are within density ranges permitted by the Comprehensive Plan;

b. Minimize negative effects of development upon the natural environment and incorporate natural features into the proposed development where possible;

c. Ensure economical, safe, and efficient routes for pedestrians, bicycles, and motor vehicles;

d. Create residential living environments that foster a sense of neighborhood identity and that are protected from the adverse effects of heavy traffic and more intensive land uses; and

e. Promote energy efficiency.

Section 2.4.30 - TENTATIVE PLAT REVIEW PROCEDURES

When an application is filed for a Subdivision, it shall be reviewed in accordance with the following procedures.

2.4.30.01 - Application Requirements

When the Director deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived.

Prior to formal submittal of an application, the applicant is encouraged to participate in an informal pre-application conference with Community Development Department staff to discuss the proposal, the applicant's requirements, and the applicant's materials developed in response to this Code's applicable requirements.

Applications shall be made on forms provided by the Director and shall be accompanied by:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. Fifteen copies of the narrative, on 8.5 by 11 in. sheets, and 15 copies of graphics at an 8.5 by 11 in. size. The Director may request additional copies

of the narrative and/or graphics for routing purposes, if needed. Related names/numbers must be legible on the graphics. The Director may also require some or all graphics at an 11 by 17 in. size if, for legibility purposes, such a size would be helpful;

d. Six sets of full-scaled black line or blueprint drawings of the graphic(s), with sheet size not to exceed 24 by 36 in. Where necessary, an overall plan with additional detail sheets may be submitted;

e. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable;

f. Graphic Requirements

Graphics shall include the following information where applicable:

1. Public Notice Map - Typically a street map at one in. = 800 ft. as per the City's public notice format;

2. Zoning Map - Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

3. Comprehensive Plan Map - Typically one in. = 800 ft. with a key that identifies each land use designation on the site and within 1,000 ft. of the site as per City format;

4. Existing Land Use Map - Typically a topographic map that extends at least a 1,000 ft. beyond the site. The map shall include building footprints and distinguish between single-family, multi-family, Commercial, and Industrial uses, as well as other significant features such as roads, parks, schools, and Significant Natural Features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

5. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, including but not limited to:

a) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

6. Tentative Subdivision Plat and Other Graphics -

a) Tentative Subdivision Plat and other graphics for both Nonresidential and Residential Subdivisions shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and contain the information listed in this Section and "b," below.

1. Nonresidential Subdivision graphics shall include features within a minimum 150-ft. radius of the site, such as existing streets and parcel boundaries; existing structures; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 -

Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed development. The Director may require that an applicant's graphics include information on lands in excess of 150 ft. from a development site, such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site.

2. Residential Subdivision graphics shall include features within a minimum of 300 feet from all exterior boundaries of the site, showing existing streets and parcel boundaries; existing structures in excess of 100 sq. ft.; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; and Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable. Additionally, if existing infrastructure is more than 300 ft. from an exterior boundary of the Residential Subdivision site, the Residential Subdivision graphics shall extend beyond the required 300 ft. to include said features and all lands between the Residential Subdivision site and the existing infrastructure.

b) The Tentative Subdivision Plat and related graphics shall also include:

1) Boundary of the proposed development site and any interior boundaries related to proposed development phases or Land Divisions;

2) Number of lots and their dimensions, including frontage, depth, and area in sq. ft.;

3) Location of existing and proposed structures and other improvements, including Building Types and gross density per acre for residential developments; location of fire hydrants, overhead lines in the abutting right of way, easements, fences, walls, parking calculations, and walkways; and any proposed use restrictions. Where required by the applicable zone, Lot Coverage and Green Area calculations shall be provided, as applicable. An indication of approximate building envelopes may be required to evaluate building relationships;

4) Location and dimensions of areas to be conveyed, dedicated, or reserved as common open spaces, common Green Area, public parks, recreational areas, school sites, and similar public and semi-public uses;

5) Existing and proposed circulation system plan and dimensions including streets, driveways, bikeways, sidewalks, multi-use paths, off-street parking areas, service areas (including refuse), loading areas, direction of traffic flow, and major points of access to public rights-of-way. Illustrative cross-sections of streets shall be provided. Notations of proposed ownership (public or private) should be included where appropriate;

6) Existing and proposed general pedestrian circulation system, including its interrelationship and connectivity with the existing and proposed vehicular, bicycle, and pedestrian circulation systems, and indicating proposed treatments for points of conflict;

7) Detailed utilities plan indicating existing and proposed utility systems and their function, including sanitary sewer, storm sewer, and drainage and water systems;

8) Identification of Significant Natural Features that were included on the Significant Natural Features map(s)

required in “5," above, to indicate the relationship of the proposal to the site’s Significant Natural Features;

9) Existing and proposed topographic contours at two-ft. intervals. Where the grade of any part of the Subdivision exceeds 10 percent and where the Subdivision abuts existing developed lots, a conceptual grading plan shall be required as follows:

a. Conceptual Grading Plans for Residential Subdivisions - Conceptual grading plans for Residential Subdivision applications shall identify all proposed cuts and fills and the associated grade changes in ft. to demonstrate adherence to the provisions in Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions. The conceptual grading plan shall also indicate how runoff and surface water from individual lots will be managed, and how the Subdivision’s surface waters will be managed. Additionally, the conceptual grading plan for Residential Subdivisions shall meet the requirements in “10,” and “11,” below;

b. Conceptual Grading Plans for Nonresidential Subdivisions - Conceptual grading plans for Nonresidential Subdivision applications shall contain adequate information to evaluate impacts to the site and adjacent areas, consistent with Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions. If a grading plan is required for a Nonresidential Subdivision, it shall indicate how these objectives are met, how runoff or surface water from individual lots will be managed, and how the subdivision’s surface waters will be managed. Additionally, Nonresidential Subdivision applications shall include two design alternatives demonstrating that the applicant has achieved the optimal balance of applicable criteria;

10) For residential development, excavation and grading shall maintain hydrology that supports existing wetland and riparian areas and the application shall demonstrate adherence;

11) For residential development, the graphics, including the conceptual grading plan, must demonstrate that each lot can be served by streets and infrastructure in a manner that is consistent with the clear and objective approval standards contained in the following: the City's development standards outlined in by the applicable underlying zoning designation standards in Article III of this Code; the development standards in Article IV of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; and the adopted City Off-street Parking Standards;

12) Approximate location of proposed easements and/or dedications for drainage, sewage, or other public utilities;

13) For residential development, a copy of the Tentative Subdivision Plat showing intended Housing Types per lot, when required to satisfy Housing Type variation provisions within the relevant zone. Single-family detached housing need not be identified. A deed declaration will be required to enforce the variations in Housing Types and ensure that this Code's densities and Comprehensive Plan densities are maintained. Single-family detached housing need not be enforced through the deed declaration;

14) For residential development, existing structures and trees located on land adjacent to the development that, between 10 a.m. and 3 p.m. on November 21, will reduce Solar Access to the subject property;

15) For residential development, location of existing structures and trees on the site that could reduce Solar Access to any buildable area within the development. The application shall indicate the type and location of trees to be preserved, and the shadow patterns of trees at their mature height for the reference period from 9 a.m. to 3 p.m. on November 21;

16) For residential development, the location of solar collectors on land adjacent to the development for which Solar Access permits have been granted;

17) For residential development, a copy of the Tentative Subdivision Plat showing which lots are intended to have Solar Access protection, and showing an area on each lot available for construction of a Solar Access-protected dwelling;

18) For residential development, a proposed solar envelope for each lot as necessary for Solar Access protection consistent with Chapter 4.6 - Solar Access; and

19) Name and address of owner(s) of record, applicant, and registered land surveyor who prepared the plat.

g. Narrative Requirements

A written statement shall include the following information:

1. Statement of the planning objectives to be achieved by the Tentative Subdivision Plat. This statement shall include a description of the proposed development, the rationale behind the assumptions and choices made, and a discussion of how the application meets the review criteria in Section 2.4.30.04 below, including the development standards required by this Code;

2. <u>Quantitative data for the following, where appropriate</u> :

   a) Total number and type of dwelling units;

   b) Parcel and lot sizes;

c) Proposed Lot Coverage of buildings and structures, where known;

d) Gross densities per acre;

e) Total square footage of Green Area; and

f) Total square footage of nonresidential construction;

3. Detailed statement outlining timing, responsibilities, maintenance, and financial assurances for all public and non-public improvements to be constructed or installed including:

a) Provisions for domestic water supply including source, quality, and approximate quantity;

b) Provisions for sewage disposal, storm drainage, and flood control;

c) Provisions for improvements and maintenance of common areas and private roads and drives, if proposed; and

d) Proposed landscaping and irrigation.

4. Statement describing phases of project, if proposed. Phases shall be:

a) For Nonresidential Subdivisions - Substantially and functionally self-contained and self-sustaining with regard to access, parking, utilities, Green Areas, and similar physical features; capable of substantial occupancy, operation, and maintenance upon completion of construction and development, and be designed such that the phases support the infrastructure requirements for the project;

b) Designed to Address Compatibility:

1) For Nonresidential Subdivisions - Addressing compatibility means arranging the phases to avoid conflicts between higher and lower density development;

2) For Residential Subdivisions - Uses permitted outright within a zone are considered to be compatible and not to conflict. Between zones, compatibility is addressed at the time the zone is established. A Residential Use permitted outright within an existing zone is considered to be compatible with Uses permitted outright within existing neighboring zones;

c) For Nonresidential Subdivisions - Properly related to other services of the community as a whole and to those facilities and services yet to be provided;

d) For Nonresidential Subdivisions - Provided with such temporary or permanent transitional features, buffers, or protective areas as may be required to prevent damage or detriment to any completed phases and to adjoining properties not in the Subdivision; and

e) For Residential Subdivisions - Each proposed phase must meet all required clear and objective standards for access, parking, transportation facilities, utilities, Green Areas, and drainage without reliance on any uncompleted phase. Each proposed phase, and the Subdivision as a whole, must be designed so that in addition to each proposed phase meeting all required infrastructure standards for that phase, at the completion of each phase all completed phases together will cumulatively meet all infrastructure standards that would be required for a project consisting of the completed phases. The Subdivision and each phase must also be designed so that by completion of all proposed phases all the phases together will meet all infrastructure requirements for the project.

5. Traffic impact study -

a) Nonresidential Subdivisions - Any proposal generating 30 or more trips per hour shall include Level of Service (LOS) analysis for the affected intersections. A Traffic Impact Analysis (TIA) is required, if required by the City Engineer. The TIA shall be prepared by a registered professional engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures.

b) Residential Subdivisions - a Traffic Impact Analysis (TIA) is required. The TIA shall be prepared by a registered professional engineer, in accordance with the most current ITE standards, and shall address both current conditions and those within a 20-year horizon. The TIA shall quantify the trip generation effects of the proposal. The TIA shall estimate trip distribution patterns. Any proposal generating 30 or more trips per hour shall include Level of Service (LOS) analysis for the affected intersections. If any affected intersection LOS is or will fall below LOS D during any hour, mitigation shall be proposed. The mitigation shall demonstrate that at least LOS D will be maintained for 20 years.

6. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable.

2.4.30.02 - Acceptance of Application

a. The Director shall process Nonresidential Subdivision applications in accordance with Chapter 2.0 - Public Hearings. The Director shall process Residential Subdivisions in accordance with the procedures in Chapter 2.14 - Partitions, Minor Replats, and Property Line Adjustments.

b. After accepting a complete application for a Nonresidential Subdivision, the Director shall schedule a public hearing to be held by the Planning Commission. After accepting a complete application for a Residential Subdivision, the Director shall commence review in accordance with Section 2.14.30.02. Notice of the hearing for a Nonresidential Subdivision shall be provided in accordance with Chapter 2.0 - Public Hearings. Notice for a Residential Subdivision shall be provided in accordance with Section 2.14.30.03.

c. After an application is accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a

new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.4.30.03 - Staff Evaluation

a. **Nonresidential Subdivisions** - For a Nonresidential Subdivision, the Director shall prepare a report that evaluates whether the proposal complies with the review criteria outlined in Section 2.4.30.04.a below. The report shall include a recommendation for approval or denial and, if needed, a list of Conditions of Approval for the Planning Commission to consider if an approval is granted.

b. **Residential Subdivisions** - For a Residential Subdivision, the Director shall prepare a Notice of Disposition that contains findings as to whether the proposal complies with the applicable review criteria outlined in Section 2.4.30.04.b, below; a decision for approval or denial; and, if needed, a list of Conditions of Approval if an approval is granted.

2.4.30.04 - Review Criteria

a. **Nonresidential Subdivisions** - Requests for the approval of a nonresidential Tentative Subdivision Plat shall be reviewed to ensure consistency with the purposes of this Chapter and the following: the City's development standards outlined in the applicable underlying Zoning Designation standards in Article III of this Code; the development standards in Article IV of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; the adopted City Off-street Parking Standards; and any other applicable policies and standards adopted by the City Council. Additionally, pursuant to Comprehensive Plan Policy 3.2.7, the application shall also demonstrate compatibility in the areas in "1-13" below, as applicable.

1. Basic site design (the organization of Uses on a site and the Uses' relationships to neighboring properties);

2. Visual elements (scale of potential development, etc.);

3. Noise attenuation;

4. Odors and emissions;

5. Lighting;

6. Signage;

7. Landscaping for buffering and screening;

8. Transportation facilities;

9. Traffic and off-site parking impacts;

10. Utility infrastructure;

11. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

12. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards; and

13. Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

b. **Residential Subdivisions** - Requests for the approval of a Residential Tentative Subdivision Plat shall be reviewed to ensure consistency with the clear and objective approval standards contained in the following: the City's development standards outlined in the applicable underlying Zoning Designation standards in Article III of this Code; the development standards in Article IV of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion

Prevention and Sediment Control Ordinance; and the adopted City Off-street Parking Standards. Additionally, the following criteria shall be met for Residential Subdivisions and the application shall demonstrate adherence to them:

1. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards;

2. Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards;

3. Land uses shall be those that are outright permitted by the existing underlying zoning designation.

4. Excavation and grading shall not change hydrology in terms of water quantity and quality that supports existing Locally Significant Wetlands and/or Riparian Corridors that are subject to Chapter 4.13 - Riparian Corridor and Wetland Provisions.

A Residential Subdivision that conforms to these criteria is considered to meet all of the compatibility standards in this Section and shall be approved. A Residential Subdivision that involves Uses subject to Plan Compatibility or Conditional Development review, or that involves a Zone Change, shall meet the applicable compatibility criteria for those Plan Compatibility, Conditional Development, and Zone Change applications.

2.4.30.05 - Action

a. Action by the Planning Commission for Nonresidential Subdivisions - The Planning Commission shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the hearing, the Planning Commission shall approve, conditionally approve, or deny the

Tentative Subdivision Plat. The Commission's decision shall include findings that specify how the application has or has not complied with the above review criteria.

b. **Action by the Director for Residential Subdivisions** - Following the staff evaluation outlined in Section 2.4.30.03, the Director shall approve, conditionally approve, or deny the Tentative Subdivision Plat. The Director's decision shall include findings that specify how the application has or has not complied with the above review criterial.

2.4.30.06 - Notice of Disposition

The Director shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings that includes a written statement of the Planning Commission's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing.

2.4.30.07 - Appeals

The decision of the Director or Planning Commission, whichever the decision-maker as outlined in this Chapter, may be appealed in accordance with the provisions of Chapter 2.19 - Appeals.

2.4.30.08 - Effective Date

Unless an appeal is filed, the decision of the Director or the Planning Commission shall become effective 12 days after the Notice of Disposition is signed.

2.4.30.09 - Effective Period of Tentative Subdivision Plat Approval

Tentative Subdivision Plat approval shall be effective for a two-year period from the date of approval. If the applicant has not submitted a Final Subdivision Plat within the two-year period (with appropriate assurances for improvements, if applicable), all approvals shall expire. Where the Planning Commission finds that conditions have not changed, at its discretion and without a public hearing, the Commission may extend the period once for a period not to exceed one additional year.

Section 2.4.40 - FINAL SUBDIVISION PLAT REVIEW PROCEDURES

2.4.40.01 - Application Requirements

Three originals of the Final Subdivision Plat, as well as an electronic version of the Plat that is compatible with City formats, shall be submitted to the Director. The Final Subdivision Plat shall conform to the approved Tentative Subdivision Plat and Article IV - Development Standards, except where modified by a Planned Development approval. See Chapter 2.5 - Planned Development. The Final Subdivision Plat shall also meet Benton County's survey and Subdivision Plat standards and contain or be accompanied by the following information:

a. Name of the Subdivision ;

b. Date, north arrow, scale, legend, and existing features such as highways and railroads;

c. Legal description of Subdivision boundaries;

d. Reference and bearings to adjoining recorded surveys;

e. Exact location and width of streets and easements intersecting the boundary of the Subdivision;

f. Subdivision, block, and lot boundary lines. Numbering of lots and blocks shall be as follows:

1. Lot numbers shall begin with the number "1", and shall be numbered consecutively in each block. The numbering generally follows the same sequence as sections in a township;

2. Block numbers shall begin with the number "1", and shall be numbered consecutively without omission or duplication throughout the Subdivision. The numbers shall be solid, of sufficient size and thickness to stand out, and placed so as to not obliterate other elements of the Final Subdivision Plat. Block and lot numbers in an addition to a Subdivision of the same name shall continue the numbering of the original Subdivision. The numbering sequence shall follow the same sequence as sections in a township; and

3. Block numbers may be omitted where blocks are of irregular shape. When block numbers are omitted, lots shall be numbered consecutively throughout the Subdivision. Lots in an addition to a Subdivision of the same name shall continue the numbering of the original Subdivision .

g. Street rights-of-way indicating widths of the rights-of-way and lengths of center lines with dimensions to the nearest 0.01-ft; and bearings, deflection angles, radii, arcs, points of curvature, and tangent bearings. Subdivision boundaries, lot boundaries, and street bearings shall be shown to the nearest 30 seconds with basis for bearings;

h. Subject to Director approval, the name and width of proposed and existing streets; width of any existing right-of-way; and width on each side of street center lines. For streets on a curvature, curve data shall be based on the street center line. In addition to center line dimensions, the radius and center angle shall be indicated;

i. Easements, clearly identified by fine dotted lines and, if already of record, their recorded reference. If an easement is not definitely located or recorded, a written statement defining the easement is required. The easement's width, length, bearing, purpose, and sufficient ties to locate it with respect to the Subdivision shall be shown. If the easement is being dedicated via the Plat, it shall be properly referenced in the owner's certificates of dedication. The City Engineer shall approve written statements defining all easements;

j. Locations and widths of waterways, drainageways, and other Watercourses for review in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

k. Locations and widths of railroad rights-of-way; and locations and widths of reserve strips at the end of or along the edge of incomplete streets on the Subdivision boundary;

l. Parcels to be dedicated to the City shall be distinguished from lots intended for sale, with acreage and alphabetic symbols for each parcel;

EXCERPT

CHAPTER 2.5
PLANNED DEVELOPMENT

Section 2.5.10 - BACKGROUND

It is the intent of this Chapter to establish procedures that permit flexibility in the land development process, allow for better preservation of Significant Natural Features, and allow for innovation in site planning and architectural design.

The Planned Development process is established to allow the review and approval of Conceptual and Detailed Development Plans, to provide the mechanism for achieving greater flexibility and improved design in cases where the scope of proposed modifications to pre-stated standards exceeds that permitted through a Lot Development Option. A Lot Development Option allows minor modifications to required specification standards on an individual lot of record. The procedures for a Lot Development Option are identified in Chapter 2.12 - Lot Development Option.

a. The Procedures of this Chapter are Applicable When -

1. A property owner requests a Conceptual and/or Detailed Development Plan concurrent with a specific project review; or

2. A Nonresidential or Residential Planned Development Overlay, established in accordance with the provisions of Chapter 3.32 - Nonresidential PD (Planned Development) Overlay or Chapter 3.33 - Residential PD (Planned Development) Overlay, respectively, exists on the site and is shown on the City's Official Zoning Map.

Depending on the level of detail provided in a Planned Development application, a Planned Development project proposal is called a Conceptual Development Plan or a Detailed Development Plan. A Conceptual Development Plan provides general concepts for development on a site. A Detailed Development Plan provides the specifics for development on a site and is required following or simultaneously with approval of a Conceptual Development Plan. When a Detailed Development Plan is processed simultaneously with a Conceptual Development Plan, it is called a Conceptual and Detailed Development Plan. Upon Planning Commission approval of a Detailed Development Plan or a Conceptual and Detailed Development Plan, Building Permits are issued consistent with that Plan.

Applications shall be made on forms provided by the Director and shall be accompanied by:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. Fifteen copies of the narrative, on 8.5 by 11 in. sheets, and 15 copies of graphics at an 8.5 by 11 in. size. The Director may request additional copies of the narrative and/or graphics for routing purposes, if needed. Related names/numbers must be legible on the graphics. The Director may also require some or all graphics at an 11 by 17 in. size if, for legibility purposes, such a size would be helpful;

d. Six sets of full-scaled black line or blueprint drawings of the graphic(s), with sheet size not to exceed 24 by 36 in. Where necessary, an overall plan with additional detail sheets may be submitted;

e. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable;

f. Graphic Requirements

Graphics shall include the following information where applicable:

1. Public Notice Map - Typically a street map at one in. = 800 ft. as per the City's public notice format;

2. Zoning Map - Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

3. Comprehensive Plan Map - Typically one in. = 800 ft. with a key that identifies each land use designation on the site and within 1,000 ft. of the site as per City format;

4. Existing Land Use Map - Typically a topographic map that extends at least a 1,000 ft. beyond the site. The map shall include building footprints and distinguish between single-family, multi-family, Commercial, and Industrial Uses, as well as other significant features such as roads, parks, schools, and Significant Natural Features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

5. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, including but not limited to:

   a) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

   b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

   c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

6. Site Plan(s) and Other Graphics -

a) Site plan(s) and other graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and contain the information listed in this Section and "b," below.

Graphics shall include features within a minimum 150-ft. radius of the site, such as existing streets and parcel boundaries; existing structures; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed development. The Director may require that an applicant's graphics include information on lands in excess of 150 ft. from a development site (e.g., such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site).

b) The site plan and related graphics shall also include:

1) Boundary of the proposed development site and any interior boundaries related to proposed development phases or Land Divisions;

2) Number of lots and their dimensions, including frontage, depth, and area in sq. ft., as applicable;

3) General location and floor area of existing and proposed structures and other improvements, including maximum building heights, Building Types, and gross density per acre for residential developments; and location of fire hydrants, overhead lines in the abutting

right-of-way, easements, fences, walls, parking calculations, and walkways; and any proposed Use restrictions. Where required by the applicable zone, lot coverage and Green Area calculations shall be provided. An indication of approximate building envelopes may be required to evaluate building relationships;

4) General location and dimensions of areas to be conveyed, dedicated, or reserved as common open spaces, common Green Area, public parks, recreational areas, school sites, and similar public and semi-public uses;

5) Existing and proposed circulation system plan and dimensions including streets, driveways, bikeways, sidewalks, multi-use paths, off-street parking areas, service areas (including refuse), loading areas, direction of traffic flow, and major points of access to public rights-of-way. Illustrative cross-sections of streets shall be provided. Notations of proposed ownership (public or private) should be included where appropriate;

6) Existing and proposed general pedestrian circulation system, including its interrelationship and connectivity with the existing and proposed vehicular, bicycle, and pedestrian circulation systems, and indicating proposed treatments for points of conflict;

7) Utilities plan indicating existing and proposed utility systems and their function, including sanitary sewer, storm sewer, and drainage and water systems;

8) Identification of Significant Natural Features that were included on the Significant Natural Features map(s) required in Section 2.5.40.01.f.5, above, to indicate the relationship of the proposal to the site's Significant Natural Features;

9) Existing and proposed topographic contours at two-ft. intervals. Where the grade of any part of the development site exceeds 10 percent and where the

development site abuts existing developed lots, a conceptual grading plan shall be required. The grading plan shall contain adequate information to evaluate impacts to the site and adjacent areas, consistent with Chapter 4.~~5~~14 - ~~Natural~~Landslide Hazard and Hillside Development Provisions. If a grading plan is required, it shall indicate how these objectives are met, how runoff or surface water from the development will be managed, and how the development's surface waters will be disposed;

10) Conceptual landscape plan drawn to scale and showing the location of existing trees and vegetation proposed to be removed from or to be retained on the site, the location and conceptual design for landscaped areas (types of plant materials as basic as trees, shrubs, and groundcover/lawn areas), and other conceptual landscape features including walls and fences;

11) For residential development, existing structures and trees located on land adjacent to the development that, between 9 a.m. and 3 p.m. on November 21, will reduce Solar Access to the subject property; and

12) For residential development, indication of which buildings will have Solar Access protection, and appropriate documentation to verify how Solar Access will be protected.

g. Narrative Requirements

A written statement shall include the following information:

1. Statement of planning objectives to be achieved by the subject development. This statement shall include a description of the proposed development, the rationale behind the assumptions and choices made, and a discussion of how the application meets the review criteria in 2.5.40.04 below, including the development standards required by this Code;

2. Quantitative data for the following where appropriate:

a) Total number and type of dwelling units;

b) Square footages of all structures;

c) Parcel size;

d) Proposed lot coverage of buildings and structures, where known;

e) Gross densities per acre;

f) Total square footage of Green Area;

g) Total number of parking spaces (compact, standard, handicapped, bicycle) and breakdown of how parking is consistent with this Code's requirements; and

h) Total square footage of nonresidential construction;

3. General statement outlining timing, responsibilities, and financial assurances for all public and non-public improvements such as irrigation, private roads and drives, landscape, and maintenance;

4. Statement describing phases of project, if proposed. Phases shall be:

a) Substantially and functionally self-contained and self-sustaining with regard to access, parking, utilities, Green Areas, and similar physical features; and capable of substantial occupancy, operation, and maintenance upon completion of construction and development;

b) Arranged to avoid conflicts between higher and lower density development;

c) Properly related to other services of the community as a whole and to those facilities and services yet to be provided; and

d) Provided with such temporary or permanent transitional features, buffers, or protective areas as may be required to prevent damage or detriment to any completed phases and to adjoining properties not in the Planned Development;

5. Traffic impact study, if required by the City Engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures. See Section 4.0.60.a; ~~and~~

6. For residential development, a statement or map describing existing and proposed buildings with protected Solar Access consistent with Chapter 4.6 - Solar Access~~.~~; and

7. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable.

h. Any proposed Floodplain Development Permit variation that exceeds the scope of Section 2.11.60.01.a shall also meet the Floodplain Development Permit Variance application requirements in Section 2.11.60.02 and, as applicable, Section 2.11.50.01. *[44 CFR 60.3(a)(1) & (b)(1), FEMA-213, FEMA-301, & Model Ordinance Sections IV-C(1)(a&b), IV-D(1-5), & VI-A(1)]*

2.5.40.02 - Acceptance of Application

a. The Director shall review the application in accordance with Chapter 2.0 - Public Hearings.

b. After accepting a complete application the Director shall schedule a public hearing to be held by the Planning Commission. Notice of the hearing shall be provided in accordance with Chapter 2.0 - Public Hearings.

c. After an application is accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.5.40.03 - Staff Evaluation

The Director shall prepare a report that evaluates whether the Conceptual Development Plan complies with the review criteria below. The report shall also include a recommendation for approval or denial and, if needed, a list of conditions for the Planning Commission to consider if an approval is granted.

2.5.40.04 - Review Criteria

Requests for the approval of a Conceptual Development Plan shall be reviewed to ensure consistency with the purposes of this Chapter, policies and density requirements of the Comprehensive Plan, and any other applicable policies and standards adopted by the City Council. The application shall demonstrate compatibility in the areas in "a," below, as applicable, and shall meet the Natural Resource and Natural Hazard criteria in "b," below:

a. Compatibility Factors -

1. Compensating benefits for the variations being requested;
2. Basic site design (the organization of Uses on a site and the Uses' relationships to neighboring properties);
3. Visual elements (scale, structural design and form, materials, etc.);
4. Noise attenuation;
5. Odors and emissions;
6. Lighting;
7. Signage;
8. Landscaping for buffering and screening;
9. Transportation facilities;
10. Traffic and off-site parking impacts;
11. Utility infrastructure;
12. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

13. Design equal to or in excess of the types of improvements required by the standards in Chapter 4.10 - Pedestrian Oriented Design Standards[1]; and

14. Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

b. Natural Resources and Natural Hazards Factors -

1. Any proposed variation from a standard within Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions shall provide protections equal to or better than the specific standard requested for variation; and

2. Any proposed variation from a standard within Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions shall involve an alternative located on the same development site where the specific standard applies.

3. Any proposed Floodplain Development Permit variation that exceeds the scope of Section 2.11.60.01.a shall also meet the Floodplain Development Permit Variance review criteria in Section 2.11.60.06

[1] Redevelopment and reconstruction of buildings in existence and permitted in zoning prior to December 31, 2006, are allowed pursuant to the requirements of Section 4.10.70.01 - Applicability, of Chapter 4.10 - Pedestrian Oriented Design Standards.

and, to the extent feasible, the base Floodplain Development Permit review criteria in Section 2.11.50.04. *[44 CFR 60.6(a)(1,3,4,&7) & Model Ordinance Sections VI-A(5)(a-j) & VI-B(1&3-5)]*

2.5.40.05 - Action by the Planning Commission

The Planning Commission shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the hearing, the Planning Commission shall approve, conditionally approve, or deny the Conceptual Development Plan. The Commission's decision shall include findings that specify how the application has or has not complied with the above review criteria.

2.5.40.06 - Notice of Disposition

The Director shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings, that includes a written statement of the Planning Commission's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing.

2.5.40.07 - Appeals

The decision of the Planning Commission may be appealed in accordance with the provisions of Chapter 2.19 - Appeals.

2.5.40.08 - Effective Date

Unless an appeal is filed, the decision of the Planning Commission shall become effective 12 days after the Notice of Disposition is signed.

2.5.40.09 - Effective Period of Conceptual Development Plan Approval

Conceptual Development Plan approval shall be effective for a three-year period from the date of approval. If the applicant has not submitted a Detailed Development Plan for the Planned Development or its phases within the three-year period, all approvals shall expire.

a. Conceptual Development Plans on Residentially Designated Property -

1. If the Conceptual Development Plan pertains to residentially designated property, was established at the request of the property owner, and there is no active Detailed Development Plan on any

Development Option process described in Chapter 2.12 - Lot Development Option, and the Minor and Major Planned Development Modification processes described below. Within the Conceptual or Detailed Development Plan, the Lot Development Option process may only be used for modification of a specific standard at a specific location where no deviation from standards has already been approved.

2.5.60.01 - Purposes of a Planned Development Modification

a. Provide a limited amount of flexibility with regard to site planning and architectural design for approved Conceptual or Detailed Development Plans; and

b. Provide elements within the development site that compensate for requested variations from approved Conceptual or Detailed Development Plans such that the intent of the original approvals is still met.

2.5.60.02 - Thresholds that Separate a Minor Planned Development Modification from a Major Planned Development Modification

a. The factors identified here describe the thresholds that separate a Minor Planned Development Modification from a Major Planned Development Modification.

1. Change in Use Type, with the exception that for a valid (still active) Planned Development that existed or was approved before December 31, 2006, a Modification request shall be considered as follows:

   a) A request to add Uses permitted by the underlying zone to up to 25 percent of the total acreage within the Planned Development site shall be considered a Minor Planned Development Modification; and

   b) A request to add Uses permitted by the underlying zone to greater than 25 percent of the total acreage within the Planned Development site shall be considered a Major Planned Development Modification;

2. Change in dwelling unit density of five percent, except as noted in “3,” below;

3. Decrease in dwelling unit density by more than three units for development sites one acre or smaller in size, or decrease in dwelling unit density by more than five units or by more than five percent, whichever is less, for development sites larger than one acre;

4. Change in the ratio of the different types of dwelling units;

5. Change in the type or location of commercial or industrial structures that would result in a less pedestrian-friendly environment, such as when a pedestrian walk is eliminated, a parking lot is placed to separate, or further separate, a building from pedestrian facilities, etc.;

6. Change in the type and location of accessways and parking areas where off-site traffic would be affected or which result in a less pedestrian-friendly environment;

7. Increase in the number of parking spaces where such increase adversely affects Significant Natural Features or pedestrian amenities, or is inconsistent with a Condition of Approval or an applicable development standard such as required Green Area;

8. Increase in the floor area proposed for nonresidential Use by more than 10 percent;

9. Decrease in the common and/or usable Green Area or open space by more than 10 percent;

10. Increase in the total ground area proposed to be covered by structures by more than 10 percent;

11. Change in specific setback requirements by more than 25 percent or by 15 percent for setback requirements previously reduced;

12. Decrease in project amenities for pedestrians or bicycles, recreational facilities, screening, and/or landscaping provisions by more than 10 percent;

13. Modification of architectural building elevations where any of the following occurs:

    a) Percentage of window coverage per elevation is decreased by more than 20 percent (may affect the number and/or shape of windows); or windows are installed on a previously specified blank wall on the perimeter of the site;

    b) Building materials for the main walls of the facades are changed;

    c) Any architectural feature is reduced by more than 20 percent. Architectural features include such items as the number of windows with trim, the number of dormers, the number of columns, the number of shutters, the square footage of porches, the number of window boxes, the linear footage of porch or deck railings, and/or the linear footage and/or height of parapets, reveals, and/or cornices, etc.;

    d) Roof pitch is reduced by 20 percent or more;

    e) Building off-sets or recesses are reduced by more than 20 percent; or

    f) Garages or carports are eliminated; and

14. Change to any aspects of the Plan involving Natural Resources and/or Natural Hazards governed by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazards and Hillsides~~, Chapter 4.11 - Minimum Assured Development Area, Chapter 4.12 - Significant Vegetation, ~~and~~ Chapter 4.13 - Riparian Corridors and Wetlands, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

b. A modification that equals or exceeds the thresholds identified in Section 2.5.60.02.a shall be processed as Major Planned Development Modification.

c. A modification that falls below the thresholds identified in Section 2.5.60.02.a or that decreases the amount of variation from a standard that was previously approved shall be processed as a Minor Planned Development Modification.

The Refinement Plan application shall:

a. Establish efficient density ranges that are consistent with the Comprehensive Plan and that include a minimum and maximum density for residential Uses;

b. Establish minimum and maximum Floor Area Ratios or site coverage requirements for nonresidential Uses;

c. Meet the application submittal requirements in Section 2.5.90.02, above;

d. Include land use regulations to implement the Refinement Plan;

e. Be specifically referred to (and ultimately adopted) as a Refinement Plan; and

f. Demonstrate compatibility in the following areas, as applicable:

1. Compensating benefits for any requested variations from the provisions of this Code;

2. Basic site design - the organization of Uses on a site and the Uses' relationships to neighboring properties;

3. Visual elements (scale, structural design and form, materials, etc.);

4. Noise attenuation;

5. Odors and emissions;

6. Lighting;

7. Signage;

8. Landscaping for buffering and screening;

9. Transportation facilities;

10. Traffic and off-site parking impacts;

11. Utility infrastructure;

12. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

13. Design equal to or in excess of the types of improvements required by the standards in Chapter 4.10 - Pedestrian Oriented Design Standards[2];

14. Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

2.5.90.05 - Action by the Planning Commission

The Planning Commission shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the hearing, the Planning Commission shall make a decision to approve, conditionally approve, or deny the proposed Refinement Plan. The Commission's decision shall include findings that specify how the proposal has or has not complied with the above review criteria.

2.5.90.06 - Notice of Disposition

The Director shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public hearings, that includes a written statement of the Planning Commission's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing.

2.5.90.07 - Appeals

The decision of the Planning Commission may be appealed in accordance with Chapter 2.19 - Appeals.

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[2] Redevelopment and reconstruction of buildings in existence and permitted in zoning prior to December 31, 2000, are allowed pursuant to the requirements of Section 4.10.70.01 - Applicability.

EXCERPT

CHAPTER 2.6
ANNEXATIONS

Section 2.6.10 - BACKGROUND

The process of land Annexation allows for the orderly expansion of the City and adequate provision for public facilities and services. The City Charter requires voter approval of an Annexation unless an Annexation is mandated by state law. For example, Health Hazard Annexations are mandated by state law and do not require voter approval.

Section 2.6.20 - PURPOSES

The procedures and review criteria for proposed Annexations are established for the following purposes:

a. Maximize citizen involvement in the Annexation review process;

b. Establish a methodology to evaluate need, serviceability, and the economic, environmental, and related social effects of proposed Annexations;

c. Provide adequate public information and sufficient time for public review before an Annexation election;

d. Ensure adequate time for City staff review; and

e. Allow for simultaneous review of multiple Annexation proposals.

Section 2.6.30 - PROCEDURES

An application filed for Annexation shall be reviewed in accordance with the following procedures:

2.6.30.01 - Determination of Annexation Type

The Director shall determine whether an application is for a Minor or Major Annexation as follows:

a. **Minor Annexation** - Intended to address situations where properties are proposed for Annexation and, by virtue of their size and development potential, have negligible impacts on surrounding properties and neighborhoods, and on the community as a whole. These Annexations are typically proposed to gain access to public services, such as sanitary sewer and water facilities, before actual Health Hazards are declared; to incorporate infill sites into the City; and/or to allow a limited level of urban development to occur on existing parcels. Minor Annexation provisions are

2. Zoning Map - Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

3. Comprehensive Plan Map - Typically one in. = 800 ft. with a key that identifies each land use designation on the site and within 1,000 ft. of the site as per City format;

4. Existing Land Use Map - Typically a topographic map that extends at least 1,000 ft. beyond the site. The map shall include building footprints and distinguish between single-family, multi-family, Commercial, and Industrial Uses, as well as other significant features such as roads, parks, schools, and Significant Natural Features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

5. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, including but not limited to:

   a) All information, associated Significant Natural Feature maps, and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside~~ Development Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

   b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

   c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

6. Graphics for Annexation applications shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and contain the following information:

a) Vicinity Map - A map of the area to be Annexed that shows adjacent City and county territory at least 300 ft. beyond the boundaries of the Annexation site for Minor Annexations, and at least 1,200 ft. beyond the boundaries of the site for Major Annexations. The map shall include features such as existing streets and parcel boundaries; existing structures; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside~~ Development Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed Annexation. The map shall be 8.5- by 11-in. size for Minor Annexations, and both 8.5- by 11-in. and 24- by 36-in. size for Major Annexations. The Director may require an area greater than 1,200 ft. beyond the site if such maps would be helpful, such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site.

b) General Land Use Plan - A map that illustrates the following, at a minimum, in sufficient detail to apply the review criteria in Section 2.6.30.06:

1) Proposed land use zones and densities;

2) Transportation corridors and functional classifications of streets within and surrounding the Annexation area;

3) Site utilities within and surrounding the Annexation area;

4) Significant Natural Features covered in 2.6.30.03.h.5, above;

5) Topographic contours at two-ft. intervals and identification of grades governed by Chapter ~~4.5 - Natural Hazard and Hillside Development~~ 4.14 - Landslide Hazard and Hillside Development Provisions; and

6) Information on land areas within at least 300 ft. of the subject property, indicating the relationship of the

Annexation area to adjacent land uses. The Director may require an applicant's General Land Use Plan to include information on lands in excess of 300 ft. from an Annexation site, as in cases where an adjacent property is large and a view of the whole parcel would be helpful. The General Land Use Plan shall identify land uses, lot lines, existing buildings, driveways, transportation connections, utilities, and Significant Natural Features covered in "5," above. Illustrative cross-sections of streets shall also be provided. An aerial photo may be used as the base for the General Land Use Plan. Ortho photos are available at City Hall.

c) The applicant may provide a more detailed General Land Use Plan and may consolidate the Annexation proposal with other applications such as a Tentative Subdivision Plat. However, a Detailed Development Plan is not required at the Annexation phase. If the applicant chooses to consolidate land use applications, all of the submittal requirements as stated in other chapters of this Code shall be met.

i. Narrative Requirements

A written statement shall include the following information:

1. Statement of availability, capacity, and status of existing water, sewer, storm drainage, transportation, park, and school facilities; and franchise utilities. The franchise utility companies shall provide a written statement confirming the ability to serve the site. The applicant shall obtain information from the affected service and utility providers using GIS base maps where available;

2. Statement of increased demand for the facilities that will be generated by the proposed Annexation. The applicant shall refer to the criteria of the City's facility master plans, available via the City Engineer, to determine the methodology used to estimate public facility demands. Information related to an actual development proposal may be included for informational purposes. At minimum, the demand calculations associated with the full range of development potential (min. to max.) under proposed land uses designations shall be addressed in the analysis;

3. Statement of additional facilities required to meet the increased demand and phasing of such facilities in accordance with projected demand. The applicant shall review adopted public facility plans, master plans, and capital improvement programs, and state whether additional facilities are planned or programmed for the Annexation area. Information related to an actual development proposal may be included for informational purposes. At minimum, the demand

calculations associated with the full range of development potential (min. to max.) under the proposed land uses designations shall be addressed in the analysis;

4. Traffic impact study, if required by the City Engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures. Information related to an actual development proposal may be included for informational purposes. At minimum, the traffic calculations associated with the full range of development potential (min. to max.) under the proposed land uses designations shall be addressed in the analysis. See also Section 4.0.60.a;

5. Statement outlining the method and source of financing required to provide additional facilities;

6. Discussion demonstrating the public need for the Annexation. To provide consistency in reviewing Annexations, the applicant shall use the information sources and methodology described in Section 2.6.30.07; and

7. Comprehensive narrative of potential positive and negative effects of the proposed Annexation related to "a," through "c," below. For properties containing a Natural Resource and/or Natural Hazard Overlay, the narrative shall include a discussion of the applicable provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

   a) Issues of need, serviceability, economics, environmental, and related social effects of the proposed Annexation on the community as a whole;

   b) Issues of need, serviceability, economics, environmental, and related social effects of the proposed Annexation on the comprehensive neighborhood of which the Annexation will become a part; and

   c) Proposed actions to mitigate negative effects/impacts.

The information provided by the applicant shall be used to assist in weighing the advantages and disadvantages of the proposed Annexation. The information shall address all aspects of the review criteria in Section 2.6.30.06, and the advantages and disadvantages shall be discussed in terms of those listed in the review criteria and further detailed in Section 2.6.30.07.

2.6.30.04 - Acceptance of Application

a. The Director shall review the application in accordance with Chapter 2.0 - Public Hearings.

b. After accepting a complete application, the Director shall schedule a public hearing to be held by the Planning Commission. Notice of the hearing shall be provided in accordance with Chapter 2.0 - Public Hearings.

c. After an application has been accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.6.30.05 - Staff Evaluation

The Director shall prepare a report that evaluates whether the Annexation proposal includes adequate information for the hearing authority to determine the proposal's compliance with the review criteria in Sections 2.6.30.06 and 2.6.30.07. The report shall include a recommendation to the Planning Commission and City Council stating whether the Annexation includes adequate information for the electorate to make an informed decision.

The Planning Commission and City Council shall determine whether the Annexation proposal complies with the review criteria and whether the Annexation request should be referred to the electorate.

2.6.30.06 - Review Criteria

Requests for Annexations shall be reviewed to ensure consistency with the purposes of this Chapter, applicable policies of the Comprehensive Plan, particularly Article 14, and other applicable policies and standards adopted by the City Council and State of Oregon.

Annexations can only be referred to the voters when the proposed Annexation site is within the City's Urban Growth Boundary (UGB), and where the findings below are made. The criteria are highlighted in bold type.

a. The applicant has demonstrated a public need for the Annexation -

1. <u>Minor Annexations</u> - Factors to be considered in evaluating public need for Minor Annexations shall include, but are not limited to:

   a) Reason for the Annexation;

   b) Health issues;

c) Adequate demonstration that the Annexation provides for the logical urbanization of land;

d) Whether the site can be served with public facilities; and

e) Discussion of the applicable livability indicators and benchmarks as specified in Section 2.6.30.07.c.

Minor Annexation proposals need not include the calculations relative to a five-year supply of serviceable land that are required in "2," below, for Major Annexations.

2. Major Annexations - Factors to be considered in evaluating public need for Major Annexations shall include, but are not limited to:

a) The five-year supply of serviceable land of the Annexation's land use category (single-family, multi-family, Commercial, or Industrial). Annexations of land designated as Public Institutional, Open Space-Conservation, or Open Space-Agriculture on the Comprehensive Plan Map are exempt from this criteria;

b) Availability of sufficient land of this type (single-family, multi-family, Commercial, or Industrial) to ensure choices in the market place. Annexations of land designated as Public Institutional, Open Space-Conservation, or Open Space-Agriculture on the Comprehensive Plan Map are exempt from this criteria; and

c) Compliance with adopted community-wide livability indicators and benchmarks relative to Major Annexations, as identified in Section 2.6.30.07.c.

The City shall provide annually updated Citywide data for the applicant to use in calculating supply and demand for the major land use categories (single-family residential, multi-family residential, Commercial and Industrial). Residential land supply and demand data shall be calculated using housing units. Commercial and Industrial land supply and demand data shall be calculated using acres.

The required data sources and methodologies for use in determining land supply and demand for Major Annexations, and the requirements for addressing community-wide benchmarks, are outlined below in Section 2.6.30.07.

b. The Annexation provides more advantages to the community than disadvantages - To provide guidance to applicants, examples of topics to

address for the advantages versus disadvantages discussion are highlighted in Section 2.6.30.07.

1. Minor Annexations - Minor Annexation proposals shall include a general discussion regarding:

   a) Advantages and disadvantages of the Annexation. Examples include the existence of a Health Hazard situation or the existence of Significant Natural Features addressed in Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Also relevant is whether or not the Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA) is applicable; and

   b) Applicable livability indicators and benchmarks identified in Section 2.6.30.07.c.

2. Major Annexations - Major Annexation proposals shall include a discussion of advantages and disadvantages in terms of the methodologies outlined in Section 2.6.30.07. Applicants are required to document the methodologies and criteria used. The Director will review the applicant's arguments, but will not conduct independent research to verify or justify them.

c. The site is capable of being served by urban services and facilities required with development - The developer is required to provide urban services and facilities to and through the site. At minimum, both Minor and Major Annexations shall include consideration of the following:

1. Sanitary sewer facilities consistent with the City's Sanitary Sewer Master Plan and Chapter 4.0 - Improvements Required with Development;

2. Water facilities consistent with the City's Water Master Plan, Chapter 4.0 - Improvements Required with Development, and fire flow and hydrant placement;

3. Storm drainage facilities and drainageway corridors consistent with the City's Stormwater Master Plan, Chapter 2.11 - Floodplain Development Permit, Chapter 4.0 - Improvements Required with Development, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and

Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

4. Transportation facilities consistent with the City's Transportation Plan and Chapter 4.0 - Improvements Required with Development; and

5. Park facilities consistent with the City's Parks Master Plan.

d. If the Annexation proposal includes areas planned for open space, general community use, or public or semi-public ownerships, the Annexation request shall be accompanied by a Comprehensive Plan Map Amendment as outlined in "1," and "2," below -

1. Areas planned for open spaces or future general community use, including planned parks, preserves, and general drainageway corridors, shall be re-designated on the Comprehensive Plan Map as Open Space-Conservation.

2. Existing, proposed, or planned areas of public or semi-public ownership, such as Oregon State University facilities or lands, school sites, City reservoirs, and portions of the Corvallis Municipal Airport, shall be re-designated on the Comprehensive Plan Map as Public Institutional.

Such required Comprehensive Plan Map Amendments shall be filed by the applicant concurrent with the Annexation request, in accordance with Chapter 2.1 - Comprehensive Plan Amendment Procedures.

e. Compatibility - The application shall demonstrate compatibility in the following areas, as applicable:

1. Basic site design - the organization of Uses on a site and its relationship to neighboring properties;

2. Visual elements (scale, structural design and form, materials, etc.);

3. Noise attenuation;

4. Odors and emissions;

5. Lighting;

6. Signage;

7. Landscaping for buffering and screening;

8. Transportation facilities;

9. Traffic and off-site parking impacts;

10. Utility infrastructure;

11. Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

12. Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards;

13. Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

2.6.30.07 - Methodologies for Some of the Review Criteria in Section 2.6.30.06

All of the provisions within this Section are required for Major Annexation proposals except for proposals or portions of proposals that include land with Comprehensive Plan designations of Public Institutional, Open Space-Conservation, or Open Space-Agriculture. Lands with these map designations are exempt from the provisions within "a," and "b," below. Minor Annexation proposals are subject only to the provisions within "c," below.

a. **Determining Five-Year Supply of Serviceable Land** - Serviceable land is land within the City limits capable of being served by public facilities.

When calculating a five-year supply of serviceable land, applicants shall refer to and follow the Council Policy addressing the five-year supply, as amended from time to time. This Policy outlines the accepted methodology and will result in more uniform application submittals.

b. **Providing information on land availability to ensure choices in the market place** - Comprehensive Plan Policy 14.3.6 states that "factors to be considered in evaluating public need for Annexation may include... the availability of sufficient land of this type to ensure choices in the market place." Minor Annexation applications are not required to include information on market choice. However, Major Annexation applications shall provide this information. Appropriate and encouraged market choice topics include, but are not limited to:

1. Information regarding a housing/jobs balance;

2. Housing rental rates and prices;

LIVABILITY INDICATORS	DESCRIPTION OF LIVABILITY INDICATORS	BENCHMARKS	LAND USE DESIGNATION	Minor Annex'n	Major Annex'n
Economic Diversification	Diversity in type, scale, and location of professional, industrial, and commercial activities to maintain a low unemployment rate and to promote diversification of the local economy.	It is considered an advantage if the Annexation request supports diversity in type, scale, and location of professional, industrial, and commercial activities to maintain a low unemployment rate and to promote diversification of the local economy. To be refined as part of a future update of this Code.	Residential[1]		
			Commercial/ Industrial[2]		Applies
			Open Space[3]		
			Public Inst.		
Livability indicators and benchmarks relating to the Corvallis Vision 2020 Statement category of "Protecting our Environment"					
Natural Features	Acres and percentage of Annexation site with Significant Natural Features.	Consistency with Significant Natural Feature protections specified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. It is considered an advantage if Significant Natural Features are protected through Annexation, since they may be better protected within the City.	Residential[1]	Applies	Applies
			Commercial/ Industrial[2]	Applies	Applies
			Open Space[3]	Applies	Applies
			Public Inst.	Applies	Applies

EXCERPT

CHAPTER 2.7
EXTENSION OF SERVICES OUTSIDE THE CITY LIMITS

Section 2.7.10 - BACKGROUND

The process of annexing land to the City allows for the orderly expansion of the City and efficient, economical provision of public services and facilities. City Charter Section 51 allows Extension of Services outside the City limits only after a City Council public hearing and adoption of an ordinance approving the Extension. This Chapter contains criteria and procedures for use in considering Extension of Service requests. Services refer to City sanitary sewer, storm sewer and water services.

Section 2.7.20 - PURPOSES

Review procedures for Extension of Services have been established to:

a. Implement City Charter Section 52;

b. Ensure that any Extension of Services complies with the Comprehensive Plan and other applicable City standards and policies;

c. Reaffirm the City's policy that Annexation is the principal method of urbanization; and

d. Expedite provision of services needed to alleviate an identified Health Hazard.

Section 2.7.30 - ELIGIBILITY FOR EXTENSION OF SERVICES

City sanitary sewer, storm sewer, and water services may be extended outside the City limits only if the City Council finds that all of the following conditions exist:

a. The property is within the City's Urban Growth Boundary;

b. Service extension will not promote development of property in a manner inconsistent with the City's Comprehensive Plan;

c. A Health Hazard exists on the subject property and extending City services is the most reasonable method of alleviating the Health Hazard; and

d. The site cannot be annexed at this time, or the Annexation has been approved but has not yet taken effect.

Section 2.7.40 - EXCEPTIONS TO ELIGIBILITY OF EXTENSION

The following are the exceptions to Section 2.7.30:

a. Properties with a written commitment of service on record prior to passage of City Charter Amendment incorporating Section 52, obligating the City to furnish services outside the City limits; and

b. Provision of water to the City of Philomath pursuant to contractual agreements.

Section 2.7.50 - PROCEDURES

Extension of Service requests under Section 2.7.30 above shall be initiated and reviewed in accordance with the following procedures:

2.7.50.01 - Initiation of Request

An Extension of Services request may be initiated by either:

a. An application submitted by the property owner(s) or their authorized agent(s); or

b. A majority vote of the City Council.

2.7.50.02 - Application Requirements

An application for Extension of Services under the provisions of Section 2.7.30 shall include the items listed below. When the Director deems any requirement below unnecessary for proper evaluation of a proposed Extension of Services application, it may be waived.

a. Consent to Annexation in a form suitable for recording with the Benton County Recorder and that meets the approval of the City Attorney;

b. Map of the area to be serviced showing the relationship of the property to the Corvallis City limits and the Corvallis Urban Growth Boundary;

c. Legal description of the property to be serviced and a boundary survey certified by a registered surveyor;

d. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, including but not limited to:

1. All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

2. All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

EXCERPT

CHAPTER 2.10
MAJOR NEIGHBORHOOD CENTER
MASTER SITE PLAN REQUIREMENTS

Section 2.10.10 - BACKGROUND

As the core of a comprehensive neighborhood and as a site serving community-wide shopping and office needs, a Major Neighborhood Center is envisioned to encompass several acres of land and contain relatively intense commercial and residential development. Development of a new Major Neighborhood Center, and particularly major redevelopment of an existing Major Neighborhood Center, may ultimately involve multiple property owners and businesses that become involved in the development of the Center at different times. Consequently, the coordinated planning and development of a Major Neighborhood Center is important not only to the neighborhood, but also to a broader area.

The Master Site Plan review process is established to provide the mechanism for achieving compatibility between Uses and the surrounding area, as well as to facilitate future developments and redevelopment consistent with established requirements. The procedures of this Chapter are applicable when a property owner requests a Master Site Plan review prior to and/or concurrent with review of a specific project within a Major Neighborhood Center. Upon Planning Commission approval of the Master Site Plan, Building Permits may be issued consistent with that Plan.

Section 2.10.20 - PURPOSES OF MASTER SITE PLAN

Master Site Plan review procedures are established in this Chapter for the following purposes:

a. Ensure that the requirements of the Neighborhood Center Zone are implemented and coordinated with respect to Major Neighborhood Centers;

b. Establish a logical framework for development on the applicant's property(ies);

c. Promote compatibility with surrounding land uses by identifying the relationships of proposed and future development with existing surrounding development and open spaces;

d. Promote the efficient use of land and energy;

f. Graphic Requirements

Graphics shall include the following information where applicable:

1. All graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, bar scale, and legend placed in the same location on each sheet. Photos shall include scale references;

2. Public Notice Map - Typically a street map at one in. = 800 ft. as per the City's public notice format;

3. Zoning Map - Typically one in. = 400 ft., but up to one in. = 800 ft., depending on the size of the site, with a key that identifies each zone on the site and within 1,000 ft. of the site as per City format;

4. Comprehensive Plan Map - Typically one in. = 800 ft. with a key that identifies each land use designation on the site and within 1,000 ft. of the site as per City format;

5. Existing Land Use Map - Typically a topographic map that extends at least a 1,000 ft. beyond the site. The map shall include building footprints and distinguish between single-family, multi-family, Commercial, and Industrial Uses, as well as other significant features such as roads, parks, schools, and Significant Natural Features identified by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

6. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, including but not limited to:

   a) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland

Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

7. General Land Use Map - The General Land Use Map shall include an off-site analysis with sufficient information on land areas within at least 300 ft. of the zone in which the subject property is located. The General Land Use Map shall indicate the relationship of the proposed development to adjacent land uses. An aerial photo may be used as the base for this off-site analysis. Ortho photos are available at City Hall.

At minimum, the General Land Use Map shall illustrate the following:

a) Existing zones and approximate densities;

b) Land uses, parcel lines, and existing buildings (building envelopes are acceptable);

c) Transportation corridors (automobile, bicycle, and/or pedestrian), functional classifications of streets, and driveways/parking areas; and

d) Significant Natural Features identified in "6," above, as applicable; and any other information that, in the Director's opinion, would assist in providing a context for the General Land Use Plan.

8. Master Site Plan Map - The Master Site Plan of the subject property(ies) shall include an on-site plan with sufficient information to indicate the existing and planned relationships among the structures, circulation systems, Significant Natural Features, open spaces, and Green Areas on the subject property; other properties

within the zone in which the subject property is located; and the land areas within at least 150 ft. of the zone. At minimum, the Master Site Plan of the subject property(ies) shall illustrate the following:

a) Factors to include for the subject property(ies) -

1) Boundary of the proposed development site and any interior boundaries related to proposed development phases or land divisions;

2) General location of improvements and existing and proposed structures (building envelopes are sufficient for proposed new buildings or expansions of existing buildings), including locations of entrances and exits; building types and gross density per acre; location of fire hydrants, overhead lines in the abutting right of way, easements, fences, walls, parking calculations, and walkways; and any proposed Use restrictions. Where required by the applicable zone, lot coverage and Green Area calculations shall be provided, as applicable;

3) General location and dimensions of areas to be conveyed, dedicated, or reserved as common open spaces, common Green Area, public parks, recreational areas, school sites, and similar public and semipublic uses;

4) Existing and proposed general circulation system plan and dimensions including streets, driveways, bikeways, sidewalks, multi-use paths, off-street parking areas, service areas (including refuse), loading areas, direction of traffic flow, and major points of access to public rights-of-way. Illustrative cross-sections of streets shall be provided. Notations of proposed ownership (public or private) should be included where appropriate;

5) Existing and proposed general pedestrian circulation system, including its interrelationship and connectivity with the existing and proposed vehicular, bicycle, and pedestrian circulation systems, and indicating proposed treatments for points of conflict;

6) General utilities plan indicating existing and proposed utility systems and their function, including sanitary sewer, storm sewer, and drainage and water systems; and natural gas, and electric power lines;

7) Identification of Significant Natural Features that were included on the Significant Natural Features map(s) required in 2.10.40.01.f.6, above, to indicate the relationship of the proposal to the site's Significant Natural Features;

8) Existing and proposed topographic contours at two-ft. intervals. Where the grade of any part of the subject site exceeds 10 percent and where the site abuts existing developed lots, a conceptual grading plan shall be required. This conceptual grading plan shall contain adequate information to evaluate impacts to the site and adjacent areas, consistent with Chapter ~~4.5 - Natural Hazard and Hillside~~ 4.14 - Landslide Hazard and Hillside Development Provisions. It shall indicate how these objectives are met, how runoff or surface water will be managed in terms of a conceptual drainage control system; and

9) Identification of the Shopping Street.

b) Factors to include for other properties within the zone in which the subject property(ies) are located and land areas within at least 150 ft. of the zone -

1) Parcel lines;

2) General locations and types of circulation and parking systems including, but not necessarily limited to, reasonable approximation of the future extension of proposed Shopping Streets and pedestrian systems;

3) General locations of public, private, and franchise utilities (e.g., sanitary sewer, storm sewer, water, natural gas, electric power); and

4) Building locations (building envelopes are acceptable), and their approximate height and current Use Types.

g. Narrative Requirements

A written statement shall include the following information:

1. A legal description of the subject property, including the street(s) along the property's frontage. Copies of the legal description shall be provided in both written and electronic format;

2. A statement of the planning objectives to be achieved by the Master Site Plan. This statement shall include a description of the character of the proposed development, a brief rationale behind the assumptions and choices made, and a discussion of how the application meets the review criteria identified below, including the development standards required by this Code;

3. A statement describing project phases, if proposed. Phases shall be:

   a) Substantially and functionally self-contained and self-sustaining with regard to access, parking, utilities, Green Areas, and similar physical features; and capable of substantial occupancy, operation, and maintenance upon completion of the construction and development, and be designed such that the phases support the infrastructure requirements for the project;

   b) Properly related to other services of the community as a whole and to those facilities and services yet to be provided; and

   c) Provided with such temporary or permanent transitional features, buffers, or protective areas as may be required to prevent damage or detriment to any completed phases and to adjoining properties not included with the subject proposal.

4. Quantitative data related to the subject site shall be provided for the following, where appropriate:

   a) Parcel sizes;

b) Total number and type of dwelling units. A proposed range with a 10 percent difference is permissible;

c) Gross residential densities per acre. A proposed range with a 10 percent difference is permissible;

d) Gross square footage of floor areas for nonresidential and residential construction. A proposed range with a 10 percent difference is permissible;

e) Floor Area Ratio(s). A proposed range with a 10 percent difference is permissible;

f) Proposed Green Areas to structure footprint ratios. A proposed range with a 10 percent difference is permissible. For a definition of Green Area, refer to Chapter 1.6 - Definitions; and

g) Number of parking spaces provided and any parking agreements with neighboring properties. A proposed range with a 10 percent difference is permissible.;

5. Traffic impact study, if required by the City Engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures. See Section 4.0.60.a; and

6. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable.

2.10.40.02 - Acceptance of Application and Staff Evaluation

a. The application shall be accepted and evaluated by City staff in accordance with the procedures identified in Sections 2.3.30.02 and 2.3.30.03 of Chapter 2.3 - Conditional Development, and with Chapter 2.0 - Public Hearings.

THIS CHAPTER IS AN ENTIRELY NEW CHAPTER TO IMPLEMENT THE FEDERAL REQUIREMENTS FOR A FLOODPLAIN DEVELOPMENT PERMIT LAND USE PROCESS. THIS CHAPTER WORKS HAND-IN-HAND WITH THE NEWLY REVISED CHAPTER 4.5 - FLOODPLAIN PROVISIONS. PLAIN FONT IS USED IN THIS CHAPTER BECAUSE IT IS ENTIRELY NEW.

CHAPTER 2.11
FLOODPLAIN DEVELOPMENT PERMIT

Section 2.11.10 - BACKGROUND

To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a Floodplain management ordinance that regulates Development in the Floodplain. This Floodplain management ordinance is housed primarily in Chapter 4.5 - Floodplain Provisions, but is in part addressed in other chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit before construction or other Development begins within any Special Flood Hazard Area (100-yr. Floodplain). In this context, the term "Development" is defined in Section 1.6.40 of Chapter 1.6 - Definitions. This chapter contains provisions for the Federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations.*[44 CFR 60.3(a)& Model Ordinance Section III-D]*

Section 2.11.20 - PURPOSES

Procedures and standards for the review of Floodplain Development Permits are established in this Chapter for the following purposes:

a. Protect human life, health and property; *[Model Ordinance Section I-C(1)]*

b. Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in Floodplains; *[Model Ordinance Section I-C(2)]*

c. Help maintain a stable tax base by providing for the sound use and Development of flood-prone areas; *[Model Ordinance Section I-C(3)]*

d. Minimize expenditure of public money for costly flood control projects;*[Model Ordinance Section I-C(4)]*

e. Minimize the need for rescue and emergency services associated with flooding and generally undertaken at the expense of the general public; *[Model Ordinance Section I-C(5)]*

f. Minimize unnecessary disruption of commerce, access and public service during times of flood;*[Model Ordinance Section I-C(6)]*

g. Facilitate the notification of potential buyers that property is in an Special Flood Hazard Area;*[Model Ordinance Section I-C(7)]*

h. Compel those who occupy property within the Special Flood Hazard Area to assume responsibility for their actions; and *[Model Ordinance Section I-C(8)]*

i. Manage the alteration of Special Flood Hazard Areas, stream channels and shorelines to minimize the impact of Development on the natural and beneficial functions of the Floodplain.*[Model Ordinance Section I-C(9)]*

Section 2.11.30 - APPLICABILITY

Unless exempt per Section 2.11.40, below, approval of a Floodplain Development Permit is required prior to initiating Development activities in any Special Flood Hazard Areas (SFHAs) established through Section 4.5.20.01.b. As defined in Section 1.6.40, Development means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, fencing, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within a Special Flood Hazard Area. *[44 CFR 60.3(a)(1) and (b)(1) & Model Ordinance Section IV-C]*

2.11.40 - EXEMPTIONS

The following types of Development are exempt from the Floodplain Development Permit process, <u>if they are allowed by other applicable provisions in this Code</u>. These activities may be prohibited by the provisions of Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; or other restrictions may apply. *[De minimus thresholds developed by Corvallis staff in coordination with FEMA/DLCD]*

a. **Placement of Fill in Residential Zones** - Within the Floodway Fringe, placement of fill in the RS-1, RS-3.5, RS-5, RS-6, RS-9, RS-9U, RS-12, RS-12U, RS-20 and MUR Zones, provided it is consistent with other applicable provisions of this Code and provided all of the following are met:

1. The fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature;

2. There are no undeveloped portions of the site that are outside the Floodway Fringe that can accommodate the items described in “a.1,” above;

3. The fill does not occupy an area that is greater than 10 percent of the minimum lot size of the corresponding zone or 10 percent of the area of the subject lot that is within the Floodway Fringe, whichever is less; and

4. The average depth of the fill does not exceed six in. over the area described in “a.3,” above;

b. **Construction of Fences and Walls** - Installation, expansion, reconstruction, and replacement of fences and/or walls within the Floodway Fringe, provided the velocity of the flood waters where the fence or wall is proposed is less than 5 ft. per second, as documented in the Flood Insurance Study for Benton County and Incorporated Areas, dated _____, 2010. Fencing and walls installed, expanded, reconstructed, and/or replaced in areas where the flood water velocity is greater than 5 ft. per second shall obtain a Floodplain Development Permit and shall comply with Section 4.5.110.12. If no Floodplain study is available to confirm the velocity of flood water flow, either the flood water velocity shall be determined consistent with Section 4.5.50.03.p to confirm whether the proposed fence and/or wall is exempt from obtaining a Floodplain Development Permit, or the flood water velocity shall be assumed to be greater than 5 ft. per second, and the fence and/or wall shall obtain a Floodplain Development Permit and be constructed consistent with the provisions in Section 4.5.110.12. *[Oregon Guidance Concerning Fencing & Walls in Special Flood Hazard Areas, FEMA/DLCD & Corvallis Staff Discussions, & Model Ordinance Section V-M]*

c. Maintenance, repair, and/or replacement of existing infrastructure facilities, provided the facilities:

1. Are in-kind maintenance, repair, and/or replacement; and

2. Will not result in an increase in Base Flood Elevation.

d. Maintenance, minor repair, and/or improvement of existing structures, provided these activities do not:

1. Result in an increase in size or intensity of use;

2. Constitute repair of Substantial Damage; or

3. Constitute a Substantial Improvement;

e. Public agency placement of signs, markers, aids, etc.;

f. Customary dredging associated with routine channel maintenance to maintain existing channel capacity, provided it is consistent with State and Federal laws and permits;

g. Removal of vegetation activities, provided they are consistent with Section 4.5.80.03.a; and

h. Landscape maintenance activities, provided they are consistent with Section 4.5.80.03.b.

Section 2.11.50 - PROCEDURES

2.11.50.01 - Application Requirements

An application for a Floodplain Development Permit shall be made on forms provided by the Floodplain Administrator or designee and shall include the following information, where applicable. When the Floodplain Administrator or designee deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived. For example, the waiving of some of the application requirements below can occur to address projects that are small or less complex in nature. However, the Floodplain Administrator or designee shall ensure that enough information is submitted to properly evaluate a proposed application's adherence to the applicable criteria. *[Modified version of standard Code text]*

a. Location and description of the subject property(ies), including all of the following, as relevant: street address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red; *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided; *[Standard Code text]*

c. Three copies of a narrative, on 8.5 by 11 in. sheets, describing how the application meets the review criteria in Section 2.11.50.04, below, and three copies of the supporting graphics at an 8.5 by 11 in. size. The Floodplain Adminstrator or designee may request additional copies of the narrative and/or graphics for routing purposes, if needed. Related names/numbers must be legible on the graphics. The

Floodplain Administrator or designee may also require some or all graphics at a 24 by 36-in. size if, for legibility purposes, such a size would be helpful; *[Standard Code text]*

d. Three sets of full-scaled black line or blueprint drawings of the site plan graphic(s) on sheet size of at least 11 in. by 17 in. suitable for photocopy reproduction. Site plan(s) and other graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and show:

1. Information required by Sections 4.5.50.02, 4.5.50.03, and 4.5.50.04, as applicable;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a&b)]*

2. Information required by Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable; and *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a&b)]*

3. Any other information relevant to the proposal; and *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

e. Adequate information for the Floodplain Administrator or designee to assess whether or not a Substantial Improvement is proposed or Substantial Damage has occurred. See Floodplain Administrator or designee for specific requirements and procedures for these determinations;*[FEMA-213 & FEMA-301 & Model Ordinance Section IV-D(1&2)]*

f. An electronic version of these documents (both text and graphics, as applicable). The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable. Any data submitted to substantiate Base Flood elevation(s), flood Depth Number(s), 0.2-ft. Floodway boundaries, or 100-year Floodway Fringe boundaries shall be compatible with the City's GIS system. *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

2.11.50.02 - Acceptance of Application

Per ORS 227, the Floodplain Administrator or designee shall review the Floodplain Development Permit application for compliance with the application requirements in Section 2.11.50.01, above. If the application is incomplete, the Administrator or designee shall

notify the applicant and state what information is needed to make the application complete. Unless the Floodplain Administrator or designee determines that additional time is warranted, the applicant shall have a maximum of 10 days from this notification to submit additional materials. *[Standard Code text]*

2.11.50.03 - Staff Evaluation

The application and any comments that have been received shall be reviewed to ensure consistency with the review criteria in Section 2.11.50.04, below.*[Standard Code text]*

2.11.50.04 - Review Criteria

Requests for approval of a Floodplain Development Permit shall be reviewed by the Floodplain Administrator or designee to ensure:

a. Consistency with the standards from Sections 4.5.80, 4.5.90, and 4.5.100, as applicable; *[Standard Code text - refers to 0.2-ft. Floodway, High Protection Floodplain, & Partial Protection Floodplain standards in Chapter 4.5 - Floodplain Provisions]*

b. New Development and subdivisions shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize flood damage;*[44 CFR 60.3(a)(4&5) & Model Ordinance Section V-A(5)]*

c. On-site waste disposal systems shall be located and constructed to avoid functional impairment, or contamination from them during flooding;*[44 CFR 60.3(a)(6) & Model Ordinance Section V-A(6)]*

d. Subdivisions shall have adequate drainage provided to reduce exposure to flood hazards. In AO and AH Federal Flood Zones, stormwater management shall be provided to guide floodwater around and away from all proposed and existing structures.*[44 CFR 60.3(a)(4) & (c)(1&11) & Model Ordinance Section V-A(7)]* This criteria shall be considered to be met if the proposed stormwater management is consistent with the provisions of the Building Code, Chapter 4.0 - Improvements Requirement with Development, and the provisions addressed in “e,” below;

e. Consistency with other applicable standards of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; the adopted City Off-street Parking

Standards; and any other applicable policies and standards adopted by the City Council; and *[streamlined version of Standard Code text]*

f. Preservation and/or protection of Significant Natural Features is achieved, consistent with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. *[Streamlined version of Standard Code text]*

2.11.50.05 - Action on Application

Based on the review criteria above, the Floodplain Administrator or designee shall review the proposed Development and either approve, conditionally approve, or deny the application.*[Standard Code text]* Floodplain Development Permits are processed like Building Permits, using a Ministerial Development process.

2.11.50.06 - Mandatory Conditions of Approval

The following Conditions of App roval are mandatory and shall be imposed on every approved Floodplain Development Permit:

a. **Required As-built Certification During Construction** - For all new construction and Substantial Improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the Lowest Floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.*[44 CFR 59.24 & 60.3(a)(1) & (b)(1) & Model Ordinance Sections IV-C & IV-C(2)(a & b)]*

b. **Required Documentation Prior to Issuance of Certificate of Occupancy**

1. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(a)]*

a) For elevated buildings and structures in Special Flood Hazard Areas (all A Federal Flood Zones), the as-built elevation of the Lowest Floor, including basement, or where no Base Flood Elevation is available the height above Highest Adjacent Grade of the Lowest Floor;*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(a)(i)]*

b) For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(a)(iii)]*

2. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(b)]*

2.11.50.07 - Permit

The Floodplain Administrator or designee shall provide the applicant with a permit that includes a written statement of the decision, a reference to the findings leading to it, any Conditions of Approval, and the appeal period deadline. The permit shall also be mailed to any persons who request such a decision. The permit and all applicable information shall be available in the Community Development Department.*[Standard Code text]*

2.11.50.08 - Permanent Retention of Development Applications - The Floodplain Administrator or designee shall maintain both paper and electronic permanent records of all Floodplain Development Permits. *[FEMA Independent Study 9, August 1999, and FEMA Region X Local Administrator's Handbook, 2000]*

2.11.50.09 - Appeals

a. The decision of the Floodplain Administrator or designee may be appealed to the Land Development Hearings Board in accordance with Chapter 2.19 - Appeals.*[Standard Code text]*

b. **Appeal Review Criteria** - An appeal of a decision made by either the Floodplain Administrator or designee or the Land Development Hearings Board shall be reviewed against the criteria set forth in Section 2.11.50.04. In acting on an appeal, the hearing body shall make specific findings in response to each of the appeal review criteria. *[Standard Code text]*

2.11.50.10 - Effective Date

Unless an appeal has been filed, the decision of the Floodplain Administrator or designee shall become effective 12 days after the permit is signed. *[Standard Code text]*

2.11.50.11 - Effective Period of Approval

a. A Floodplain Development Permit shall expire 180 days after the permit is effective per Section 2.11.50.10, unless:

1. Start of Construction for the permitted activity has occurred and thereafter is pursued to completion; or*[44 CFR 59.1 & Model Ordinance Section IV-C(4)(a)]*

2. An extension consistent with Building Permit extension procedures is granted by the Floodplain Administrator or designee, in cases where Start of Construction has not yet occurred. However, the granting of such extension shall also require the Floodplain Administrator or designee to review the Floodplain Development Permit activity(ies) relative to the applicable Code requirements to ensure that the Floodplain Development Permit is still consistent with Code provisions. If the Floodplain Administrator or designee finds that the Floodplain Development Permit is still consistent with the applicable Code requirements, then the extension may be granted by the Floodplain Administrator or designee. If the Floodplain Administrator or designee finds that the Floodplain Development Permit is no longer consistent with the applicable Code requirements, then the Floodplain Administrator or designee shall deny the extension request.

b. Commencement of work includes Start of Construction, when the permitted work requires a Building Permit. *[44 CFR 59.1 & Model Ordinance Section IV-C(4)(b)]*

2.11.60 - VARIANCES

An application filed for a Floodplain Development Permit Variance shall comply with the following:

2.11.60.01 - Limited Scope of Variance Applications

a. Variances are limited to the following:

1. Altering the required elevation standard for new construction and Substantial Improvements on a lot less than or equal to one-half acre, provided the lot is contiguous to and surrounded by lots with existing structures constructed below the Base Flood Elevation; *[44 CFR 60.6(a)(2) & Model Ordinance Section VI-B(2)]*

2. Allowing a Water Dependent use, provided structures or other Development are protected by methods that minimize flood damages during the Base Flood and create no additional threats to public safety;*[44 CFR 60.6(a)(7) & Model Ordinance Section VI-B(5)]*

3. Reconstructing, rehabilitating, or restoring a Designated Historic Resource upon a determination that the proposed restoration, rehabilitation, or restoration will not preclude the structure's continued designation as a Designated Historic Resource and the Variance is the minimum necessary to preserve the historic character and design of the structure; or *[44 CFR 60.6(a) & Model Ordinance Section VI-B(6)]*

4. Allowing a lesser degree of floodproofing than watertight or dry-floodproofing for nonresidential buildings in very limited circumstances, where it can be determined that such action will have low damage potential and otherwise comply with Building Codes.*[44 CFR 60.6 & Model Ordinance Section VI-B(8)]*

b. Variance requests that exceed the limited scope described above in "a," above, shall be made through the Planned Development process in Chapter 2.5 - Planned Development. *[See modifications to Chapter 2.5 - Planned Development. Those modifications augment the Planned Development application materials and review criteria to add those in this new Chapter 2.11. Thus, the review criteria is a combination of the standard Planned Development criteria, plus the Floodplain Development Permit Variance criteria, plus the standard Floodplain Development Permit criteria, as applicable.]*

2.11.60.02 - Variance Application Requirements

When the Floodplain Administrator or designee deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived.*[Standard Code text]*

An application for a Floodplain Development Permit Variance shall include:

a. The items listed above in Sections 2.11.50.01 and an application submittal fee equal to that of a Major Lot Development Option application submittal fee; *[Model Ordinance Section VI-A(1)]*

b. Narrative explaining the basis for the Variance request and how the request still meets the purposes in Section 2.11.20 and 4.5.10; and *[Model Ordinance Section VI-A(1)]*

c. Other narrative and technical information sufficient to demonstrate compliance with the review criteria in Section 2.11.60.06. The applicant shall also provide narrative and technical information sufficient to demonstrate compliance with the review criteria in Section 2.11.50.04 which can still be met, despite the Floodplain Development Permit Variance request.*[Model Ordinance Section VI-A(1) & Standard Code text]*

2.11.60.03 - Acceptance of Variance Application - An application for a Floodplain Development Permit Variance shall be accepted and reviewed in accordance with the procedures in Section 2.12.30.02.b, except that public notice distance shall be in accordance with Section 2.11.60.04, below. *[Model Ordinance Section VI-A(2) & Standard Code text]*

2.11.60.04 - Public Notice for a Variance Application - The public notice for a Floodplain Development Permit Variance shall be issued in accordance with the provisions in Section 2.0.50.04, except that the public notice distance shall be 300 ft., as required for the land use applications in Section 2.0.50.04.c.2. *[Model Ordinance Section VI-A(3) & Standard Code text]*

2.11.60.05 - Staff Evaluation - The Floodplain Administrator or designee shall prepare a report that evaluates whether or not the proposal qualifies as a Floodplain Development Permit Variance per Section 2.11.60.01, includes the required application materials per Section 2.11.60.02, meets the purposes in Sections 2.11.20 and 4.5.10, and complies with the review criteria in Section 2.11.60.06. The Floodplain Administrator or designee shall also evaluate the proposed Floodplain Development Permit Variance with respect to the review criteria in Section 2.11.50.04, to see how many of the criteria can still be met. The report shall include a recommendation for approval or denial and, if needed, a list of conditions for the Land Development Hearings Board to consider if an approval is granted. *[Standard Code text]*

2.11.60.06 - Review Criteria for a Variance Application

In reviewing requests for the approval of a Floodplain Development Permit Variance, the Land Development Hearings Board shall consider the purposes of this Chapter, the

purposes in Section 4.5.10, the Variance thresholds contained in Section 2.11.60.01, the base Floodplain Development Permit review criteria in Section 2.11.50.04, standards specified in other sections of this chapter and Chapter 4.5 - Floodplain Provisions, all technical evaluations, and the criteria in "a," through "d," below. All of the criteria in "a," through "d," below, shall be met. In addition, all of the review criteria in Section 2.11.50.04 shall be met, with the exception of specific aspects of the criteria that cannot be met because of the nature of the Floodplain Development Permit Variance request. It is the applicant's burden to show that the Variance is warranted and meets said criteria. *[Model Ordinance Section VI-A(4&5) & Standard Code text]*

a. Variances shall not be issued within a designated Floodway if any increase in flood levels during the Base Flood discharge would result.[1] *[44 CFR 60.6(a)(1&7) & Model Ordinance Section VI-B(1&5)]*

b. Variances shall only be issued upon a determination that the Variance is the minimum necessary, considering the flood hazard, to afford relief.*[44 CFR 60.6(a)(4) & Model Ordinance Section VI-B(3)]*

c. Variances shall only be issued upon a:*[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)]*

1. Showing of good and sufficient cause;*[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(a)]*

2. Determination that failure to grant the Variance would result in exceptional hardship to the applicant;*[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(b)]*

3. Determination that the granting of the Variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, or creation of nuisances; and *[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(c)]*

4. Determination that the granting of the Variance will not cause fraud on or victimization of the public, or conflict with existing local laws or ordinances. *[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(c)]*

[1]There are unique circumstances under which the Floodplain Administrator or designee may allow a rise in Base Flood Elevation in the Floodway - see Sections 4.5.50.04 and 4.5.80.05. However, these exceptions are granted via the provisions of those two Code sections and not through the Variance provisions of this chapter. *[44 Code of Federal Regulations (CFR) Part 60.3(d)(4)]*

d. Variances shall consider the following additional factors:*[Model Ordinance Section VI-A(5)]*

1. The danger that materials may be swept onto other lands to the injury of others as a result of approving the Variance request;*[Model Ordinance Section VI-A(5)(a)]*

2. The potential to endanger life and property due to flooding or erosion damage caused by approval of the Variance request;*[Model Ordinance Section VI-A(5)(b)]*

3. The susceptibility of the proposed facility and its contents to flood damage, and the effect of such damage on the individual owner and adjacent properties;*[Model Ordinance Section VI-A(5)(c)]*

4. The importance of the services provided by the proposed facility to the community;*[Model Ordinance Section VI-A(5)(d)]*

5. The necessity to the facility of a waterfront location, where applicable;*[Model Ordinance Section VI-A(5)(e)]*

6. The availability and viability of alternate locations for the proposed use that are not subject to flooding or erosion damage;*[Model Ordinance Section VI-A(5)(f)]*

7. The compatibility of the proposed use with existing and anticipated Development. This criteria shall be considered to be met if the proposed application meets the review criteria in Section 2.11.50.04.e;*[Model Ordinance Section VI-A(5)(g)]*

8. The relationship of the proposed use to the Floodplain management program for that area;*[Model Ordinance Section VI-A(5)(g)]*

9. The safety of access to the property in times of flood for ordinary and emergency vehicles;*[Model Ordinance Section VI-A(5)(h)]*

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters, and the effects of wave action, if applicable, expected at the site; and *[Model Ordinance Section VI-A(5)(i)]*

11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities

such as sewer, gas, electrical, and water systems, and streets and bridges. *[Model Ordinance Section VI-A(5)(j)]*

2.11.60.07 - Action on Variance Application - The Land Development Hearings Board shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the public hearing, the Board shall approve, conditionally approve, or deny the Floodplain Development Permit Variance. The Board's decision shall include findings that specify how the application has or has not complied with the review criteria in Section 2.11.60.06. The Board's decision shall also include findings that specify the extent to which the application has or has not complied with the original Floodplain Development Permit review criteria in Section 2.11.50.04. *[44 CFR 60.6(a)(5) & Model Ordinance Section VI-C]*

2.11.60.08 - Notice of Disposition - The Floodplain Administrator or designee shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings that includes a written statement of the Land Development Hearings Board's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. *[Standard Code text]*

If a Variance is granted to allow the construction of a building below the Base Flood level, the property owner shall be put on notice along with the written decision that the permitted building will have its Lowest Floor below the Base Flood Elevation or flood depth, and that the cost of flood insurance likely will be commensurate with the increased flood damage risk. *[44 CFR 60.6(a)(5) & Model Ordinance Section VI-C]*

A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing. *[Standard Code text]*

2.11.60.09 - Permanent Retention of Variance Applications - The Floodplain Administrator or designee shall maintain a permanent record of all Floodplain Development Permit Variances, and report any Variances to the Federal Emergency Management Agency upon request. *[44 CFR 60.6(a)(6) & Model Ordinance Section VI-A(7)]*

2.11.60.10 - Appeals - The decision of the Land Development Hearings Board may be appealed in accordance with Chapter 2.19 - Appeals.*[Standard Code text]*

2.11.60.11 - Effective Date - Unless an appeal has been filed, the decision of the hearing authority shall become effective 12 days after the Notice of Disposition is signed.*[Standard Code text]*

2.11.60.12 - Effective Period of Approval -

a. A Floodplain Development Permit Variance shall expire 180 days after issuance unless:

1. Start of Construction for the permitted activity has occurred and thereafter is pursued to completion; or*[44 CFR 59.1 & Model Ordinance Section IV-C(4)(a)]*

2. An extension consistent with Building Permit extension procedures is granted by the Floodplain Administrator or designee, in cases where Start of Construction has not yet occurred. However, the granting of such extension shall also require the Floodplain Administrator or designee to review the Floodplain Development Permit Variance activity(ies) relative to the applicable Code requirements to ensure that the scope of the Variance activities has not deviated further from Code provisions as a result of any subsequent Land Development Code Text Amendment(s). If the Floodplain Administrator or designee finds that the Floodplain Development Permit Variance has not deviated further from the applicable Code requirements, then the extension may be granted by the Floodplain Administrator or designee. If the Floodplain Administrator or designee finds that the Floodplain Development Permit Variance does indeed vary further from applicable Code requirements, then the Floodplain Administrator or designee shall deny the extension request.

b. Commencement of work includes Start of Construction, when the permitted work requires a Building Permit. *[44 CFR 59.1 & Model Ordinance Section IV-C(4)(b)]*

EXCERPT

CHAPTER 2.12
LOT DEVELOPMENT OPTION

Section 2.12.10 - BACKGROUND

A Lot Development Option provides a means to obtain, within specified thresholds, variations from some clearly measurable, numerically quantifiable development standards. The Lot Development Option exists for those circumstances where uniform, unvarying rules would prevent a more efficient use of a lot or parcel, prevent better preservation of Significant Natural Features, and/or prevent innovation in site planning and architectural design. A typical example is permitting a structure to be located closer to a property boundary than normally allowed by the zone regulations.

A Lot Development Option applies only to existing individual lots or parcels or to individual lots or parcels that are approved, or requested for approval, as part of a Tentative Subdivision Plat or Minor Land Partition process. Proposed modifications that exceed the allowed scopes of Minor and Major Lot Development Options as outlined in this Chapter need to be sought through the Planned Development process described in Chapter 2.5 - Planned Development.

Unless otherwise stated in the following chapters, the Lot Development Option process shall not be used to vary from the standards in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Requests for variations to the requirements in Chapter 4.0 – Improvements Required with Developent shall be processed as a Major Lot Development Option.

Section 2.12.20 - PURPOSES

Procedures and standards for the review of Lot Development Options are established in this Chapter for the following purposes:

a. Permit efficient use of land;

b. Provide flexibility and innovation in site planning and architectural design on individual lots;

c. Encourage construction techniques and allow building locations that conserve energy;

d. Minimize procedural delays and ensure due process in the review of unique development situations;

e. Provide an avenue for better preservation of Significant Natural Features; and

f. Provide benefits within the development that compensate for the variations from development standards such that the intent of the development standards is still met.

Section 2.12.30 - PROCEDURES

An application filed for a Lot Development Option shall comply with the following:

2.12.30.01 - Application Requirements

When the Director deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived.

An application for a Lot Development Option shall be made on forms provided by the Director and shall include the following, where applicable:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. Narrative addressing all aspects of the requested variation(s), the rationale behind the assumptions and choices made, and describing how the application meets the review criteria in Section 2.12.30.06, below; and

d. Site plan(s) no larger than 11 by 17 in. suitable for photocopy reproduction. Site plan(s) and other graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and show:

1. Relationship of the site to adjoining properties, streets, alleys, structures, public utilities, and drainageways;

2. Identification of all requested variations;

3. Lot line dimensions;

4. Existing and proposed structures;

5. Structures on adjacent property(ies) affected by the request;

6. Vehicle and pedestrian access points and accessways;

7. Drainageways and any other prominent features;

8. Location of trees and shrubs over three ft. in height;

9. Fences and walls;

10. Off-street parking facilities;

11. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable; and

12. Any other information relevant to the proposal.

e. Documentation that the lot(s) and/or parcel(s) under consideration fall within the thresholds identified in Section 2.12.30.03, below.

f. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable;

2.12.30.02 - Acceptance of Application

a. Minor Lot Development Option -

1. Per ORS 227, the Director shall review the Lot Development Option application for compliance with the application requirements in Section 2.12.30.01, above. If the application is incomplete, the Director shall notify the applicant and state what information is needed to make the application complete. The applicant shall have 10 days from this notification to submit additional materials.

2. After accepting a complete application, the Director shall schedule a public hearing to be held by the Land Development Hearings Board. Notice of the hearing shall be provided in accordance with Chapter 2.0 - Public Hearings.

3. After an application is accepted as complete, any revisions to it that result in the need for an additional public notice to be mailed shall be regarded as a new application. Such new application shall require additional filing fees and rescheduling of the required public hearing.

2.12.30.03 - Determination of Lot Development Option Type - The Director shall determine whether an application qualifies as a Minor or Major Lot Development Option, as described in "a," and "b," below.

a. Minor Lot Development Option - A Minor Lot Development is classified as General Development and shall be processed consistent with this chapter. A Lot Development Option shall be considered Minor if it:

1. Meets "c" - "e," below; and

2. Falls within the thresholds in "h," below.

b. Major Lot Development Option - A Major Lot Development Option is classified as Special Development and shall be processed consistent with this chapter. A Lot Development Option shall be considered Major if it:

1. Meets "c" - "e," below;

2. Exceeds the thresholds of a Minor Lot Development Option in "h," below; and

3. Falls within the thresholds in "i," below.

c. Unless otherwise stated in the following chapters, the Minor and Major Lot Development Option processes shall not be used to vary from the standards in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

d. Minor and Major Lot Development Option requests shall apply only to existing individual lots or parcels or to individual lots or parcels that are approved, or requested for approval, as part of a Tentative Subdivision Plat or Minor Land

b) Applicable criteria for the decision;

c) Place, date, and time comments are due;

d) Statement that copies of all evidence relied upon by the applicant are available for review, and that copies can be obtained at cost;

e) Name and phone number of staff contact person;

f) Statement that a Notice of Disposition shall be provided to the applicant and any person who submits written comments;

g) An explanation of appeal rights; and

h) A summary of the local decision making process.

b. Major Lot Development Option - Public Notice for a Major Lot Development Option shall be provided consistent with Section 2.0.50.04.b.

2.12.30.05 - Staff Evaluation

a. **Minor Lot Development Option** - The application and any comments that have been received shall be reviewed to ensure consistency with the review criteria in Section 2.12.30.06.a, below.

b. Major Lot Development Option - The Director shall prepare a report that evaluates whether the proposal complies with the review criteria in Section 2.12.30.06.b, below. The report shall include a recommendation for approval or denial and, if needed, a list of conditions for the Land Development Hearings Board to consider if an approval is granted.

2.12.30.06 - Review Criteria

a. Minor Lot Development Option - With respect to the requested variation, a Minor Lot Development Option shall be reviewed to determine if the following criteria have been met:

1. The proposal is consistent with Section 2.12.30.03.a and Sections 2.12.30.03.c-e and "h;"

2. The land use for the proposed development is allowed in the underlying zone;

3. The proposed development falls within the minimum and maximum density requirements for the underlying zone;

4. All structures comply with Building and Fire Codes and Vision Clearance requirements established by the City Engineer;

5. The proposed development is not contrary to the background and purposes in Sections 2.12.10.and 2.12.20 and any other applicable policies and standards adopted by the City;

6. The proposed development does not substantially reduce the amount of privacy enjoyed by users of neighboring structures when compared to development located as specified by this Code;

7. The proposed development does not adversely affect existing physical and natural systems, such as traffic, drainage, dramatic land forms, or parks, nor adversely affect the solar access potential for abutting properties when compared to development located as specified in this Code;

8. Where architectural features are involved, the proposed development is compatible with the design character of existing structures on adjoining properties;

9. Where variations are proposed to Chapter 4.10 - Pedestrian Oriented Design Standards, the proposed development implements the purpose(s) of that chapter through inclusion of additional benefits to the pedestrian environment that compensate for the requested variations from development standards;

10. Preservation and/or protection of Significant Natural Features is achieved, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets are also designed along contours, and structures are designed to fit the topography of the site to ensure compliance with these Code standards; and

11. The proposed development shall provide benefits within the development that compensate for the variations from development standards such that the intent of the development standards is still met.

b. Major Lot Development Option - A Major Lot Development Option shall be reviewed to ensure consistency with the purposes of this Chapter, policies and density requirements of the Comprehensive Plan, other applicable policies and standards adopted by the City Council, and the following criteria:

1. The proposal is consistent with Section 2.12.30.03.b, c, d, e, g, and i;

2. The proposal is consistent with “a.2" through “a.11,” above; and

3. With respect to the requested variations, the application demonstrates compatibility in the following areas, as applicable:

   a) Basic site design (the organization of Uses on a site and the Uses’ relationships to neighboring properties);

   b) Visual elements (scale, structural design and form, materials, etc.);

   c) Noise attenuation;

   d) Odors and emissions;

   e) Lighting;

   f) Signage;

   g) Landscaping for buffering and screening;

   h) Transportation facilities;

   i) Traffic and off-site parking impacts;

   j) Utility infrastructure;

   k) Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

   l) Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards; and

m) Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards.

2.12.30.07 - Action on Application

a. **Minor Lot Development Option** - Based on the review criteria above and any written comments received from affected parties, the Director shall review the proposed development and either approve, conditionally approve, or deny the application after the completion of the 14-day comment period.

b. **Major Lot Development Option** - The Land Development Hearings Board shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the public hearing, the Board shall approve, conditionally approve, or deny the Major Lot Development Option. The Board's decision shall include findings that specify how the application has or has not complied with the review criteria in Section 2.12.30.06.b.

2.12.30.08 - Notice of Disposition

a. **Minor Lot Development Option** - The Director shall provide the applicant with a Notice of Disposition that includes a written statement of the decision, a reference to the findings leading to it, any Conditions of Approval, and the appeal period deadline. The Notice shall also be mailed to persons who provided written comment on the mailed notice. The Notice of Disposition and all applicable information shall be available in the Development Services Division of the Community Development Department.

b. **Major Lot Development Option** - The Director shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings that includes a written statement of the Land Development Hearings Board's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing.

EXCERPT

CHAPTER 2.13
PLAN COMPATIBILITY REVIEW

Section 2.13.10 - BACKGROUND

Each zone is intended for a predominant type of land use. Certain other Uses are permitted, but the intensity and characteristics of those Uses require review to ensure their compatibility with the site and with nearby land uses. For example, any of the following may indicate the need for an individual review of the circumstances of development:

a. Building's size in relation to other buildings in the area;

b. Residential, commercial, or industrial aspects of a proposed development;

c. Character of surrounding development;

d. Traffic capacity of adjacent streets; and

e. Potential environmental effects.

Uses requiring Plan Compatibility Review are specified for each zone. For such Uses, Plan Compatibility Review is required before a Building Permit can be issued.

Section 2.13.20 - PURPOSES

Procedures and review criteria for Plan Compatibility Review are established for the following purposes:

a. Encourage originality, flexibility, and innovation in site planning and development, including architectural, engineering, and landscaping design;

b. Protect neighboring property owners and residents by ensuring reasonable provisions have been made regarding surface water drainage; suitable sound and sight buffers; preservation of views, light, and air; and other aspects of design that may have substantial effects on neighboring land uses;

c. Preserve the City's natural beauty and the quality of its visual character by ensuring proposed structures or improvements are compatible with the terrain and existing development; by preventing unnecessary and inappropriate destruction or blighting of natural landscapes or existing improvements; and by requiring that proper attention be given to the exterior appearance of structures, signs, parking areas, landscaping, and other improvements;

d. Protect and ensure adequacy and usefulness of public and private facilities and services as they relate to each other and to the neighborhood or area;

e. Maintain and improve the qualities of and relationships among individual buildings, structures, and physical improvements that best contribute to the amenities and attractiveness of a neighborhood or area; and

f. Promote and encourage energy conservation .

Section 2.13.30 - PROCEDURES

When an application is filed for a Plan Compatibility Review, it shall be reviewed in accordance with the following procedures.

2.13.30.01 - Application Requirements

When the Director deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived.

An application for Plan Compatibility Review shall include the following:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. Narrative addressing all aspects of the requested variation(s) and describing how the application meets the review criteria in Section 2.13.30.05, below; and

d. One set of plans no larger than 24- by 36-in. and one set of plans reduced to no larger than 11- by 17-in. Where necessary, additional detail sheets shall be provided. Site plan(s) and other graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and show existing and proposed:

3. Proposed varieties and sizes of trees and plant materials;

4. Other pertinent landscape features, including irrigation systems required to maintain plant materials.

h. Data indicating:

1. Square footage of site and structures;

2. Building coverage (as a percentage of the site);

3. Square footage of the site to be landscaped;

4. Landscape coverage (as a percentage of the site);

5. Number of parking spaces provided;

6. Building materials to be used; and

7. Specifications as to type, color, and texture of exterior surfaces of proposed structures.

i. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

j. Any additional information that the Director may require for proper evaluation of the proposed site plan. Such additional information shall be required only where its need can be justified on the basis of special and/or unforeseen circumstances; and

k. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable.

2.13.30.04 - Staff Evaluation

The application and any written comments that have been received shall be reviewed to ensure consistency with the review criteria in Section 2.13.30.05 below.

2.13.30.05 - Review Criteria

Uses requiring Plan Compatibility Review shall be reviewed to ensure compatibility with existing and potential Uses on nearby lands. The following factors shall be considered:

a. The proposed development shall be in conformance with the purposes of this Chapter;

b. Neighboring property owners and residents shall be protected through reasonable provisions regarding surface water drainage; suitable sound and site buffers; preservation of views, light, air; and other aspects of design that may have substantial effects on neighboring land uses;

c. The proposed development shall not adversely affect traffic, parking, and access; and

d. Where Significant Natural Features are involved, the proposed development shall not adversely impact Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

2.13.30.06 - Action on Application

Based on the review criteria above and any written comments received from affected parties, the Director shall review the proposed development and either approve, conditionally approve, or deny the application after the completion of the 14-day comment period.

EXCERPT

CHAPTER 2.14
PARTITIONS, MINOR REPLATS, AND PROPERTY LINE ADJUSTMENTS

Section 2.14.10 - BACKGROUND

The division of land through a Subdivision process is addressed in Chapter 2.4 - Subdivisions and Major Replats. A Subdivision occurs where four or more lots are created in a calendar year, and requires review and approval as specified in Chapter 2.4 - Subdivisions and Major Replats. The division of land through an Expedited Land Division process is addressed in Chapter 2.5 - Planned Development. An Expedited Land Division occurs where four or more lots are created in a calendar year on a site with an approved Detailed Development Plan.

This Chapter provides procedural requirements for Residential and Nonresidential Partitions, which involve creation of three or fewer lots in a calendar year, and for Minor Replats and Property Line Adjustments. For the purposes of this Chapter, Residential Partitions, Minor Replats, and Property Line Adjustments are those involving lands with a Zoning Designation of RS-1, RS-3.5, RS-5, RS-6, RS-9, RS-9(U), RS-12, RS-12(U), RS-20, and MUR. Nonresidential Partitions, Minor Replats, and Property Line Adjustments are those with a Zoning Designation other than those for Residential Partitions, Minor Replats, and Property Line Adjustments. Except on appeal, each of these is reviewed through a General Development process without a public hearing. As with Subdivisions, Partitions, Minor Replats, and Property Line Adjustments are subject to design requirements contained in Article IV of this Code.

Section 2.14.20 - PURPOSES

Land Division procedures are established in this Chapter for the following purposes:

a. Ensure that building sites are of sufficient size and appropriate design for their intended uses and that lots to be created are within density ranges permitted by the Comprehensive Plan;

b. Minimize negative effects of development upon the natural environment and incorporate Significant Natural Features into the proposed development where possible;

c. Ensure economical, safe, and efficient routes for pedestrians, bicycles, and motor vehicles;

d. Ensure appropriate levels of urban facilities and services including provisions for water, drainage, and sewage;

e. Create residential living environments that foster a sense of neighborhood identity and are protected from the adverse effects of heavy traffic and more intensive land uses; and

f. Promote energy efficiency.

Section 2.14.30 - TENTATIVE PARTITION PLAT REVIEW PROCEDURES

Whenever an application is filed for a Partition, it shall be reviewed in accordance with the following procedures.

2.14.30.01 - Application Requirements

When the Director deems any requirement below unnecessary for the proper evaluation of a proposed application, it may be waived.

Applications shall be made on forms provided by the Director and shall be accompanied by:

a. Location and description of the subject property(ies), including all of the following, as relevant: address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red;

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided;

c. An electronic version of these documents (both text and graphics, as applicable) if an applicant has produced part or all of an application in an electronic format. The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable;

d. **Graphic Requirements** - The Tentative Plat and other graphics for both Nonresidential and Residential Partitions shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same

location on each sheet and contain the information listed below. The Tentative Plat and other graphics shall not exceed 24 by 36 in. and shall include the following information, as applicable:

1. Names of the owner, partitioner, engineer, and surveyor as appropriate;

2. Property line boundaries of all contiguous land in the same ownership as the area encompassed in the application;

3. Sufficient description to define location and boundaries of the area to be partitioned, re-platted, and/or adjusted;

4. Location of existing structures;

5. Number and type of units proposed when known and appropriate;

6. Location and width of all existing or proposed public or private accessways (rights-of-way) including any reserve strips and parking areas;

7. Location of all existing and proposed public and private utilities, including water, sewer, and storm drainage;

8. Proposed parcel layout indicating dimensions, parcel lines, and lot areas;

9. Approximate location and width of Watercourses for review in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; and

10. All areas to be dedicated to the public and their proposed Uses including street rights-of-way, drainageways, easements, and reserve strips.

11. Significant Natural Features Map(s) - Maps shall identify Significant Natural Features of the site, and provide all Code-required Significant Natural Feature information including but not limited to:

a) All information and preservation plans required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable;

b) All Jurisdictional Wetlands not already shown as part of "a," above. While not all Jurisdictional Wetlands are locally regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions, they need to be shown so that the City can route the application to the appropriate state and federal agencies for comment; and

c) Archaeological sites recorded by the State Historic Preservation Office (SHPO).

12. Tentative Plat and Other Graphics -

a) General -

1) Nonresidential Partition Graphics - Nonresidential Partition graphics shall include features within a minimum 150-ft. radius of the site, such as existing streets and parcel boundaries; existing structures; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable; and any other information that, in the Director's opinion, would assist in providing a context for the proposed development. The Director may require that an applicant's graphics include

information on lands in excess of 150 ft. from a development site (e.g., such as in cases where an adjacent property is large and a view of the whole parcel would be helpful, or when existing infrastructure is far away from the site).

2) Residential Partition Graphics - Residential Partition graphics shall include features within a minimum of 300 feet from all exterior boundaries of the site, showing existing streets and parcel boundaries; existing structures in excess of 100 sq. ft.; driveways; utilities; Significant Natural Features regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; and Minimum Assured Development Area information from Chapter 4.11 - Minimum Assured Development Area (MADA), if applicable. Additionally, if existing infrastructure is more than 300 ft. from an exterior boundary of the Residential Partition site, the Residential graphics shall extend beyond the required 300 ft. to include said features and all lands between the Residential Partition site and the existing infrastructure.

b) Conceptual Grading Plans - Existing and proposed topographic contours at two-ft. intervals. Where the grade of any part of the Partition exceeds 10 percent and where the Partition abuts existing developed lots, a conceptual grading plan shall be required as follows:

1. Nonresidential Partitions - Conceptual grading plans for Nonresidential Partition applications shall contain adequate information to evaluate impacts to the site and adjacent areas, consistent with Chapter ~~4.5 - Natural Hazard~~ 4.14 - Landslide Hazard and Hillside Development Provisions. If a grading plan is required for a Nonresidential Partition, it shall indicate how these objectives are met, how runoff or surface water

from individual lots will be managed, and how the proposal's surface waters will be managed. Additionally, Nonresidential Partition applications shall include two design alternatives demonstrating that the applicant has achieved the optimal balance of applicable criteria;

2. Residential Partitions - Conceptual grading plans for Residential Partition applications shall identify all proposed cuts and fills and the associated grade changes in ft. to demonstrate adherence to the provisions in Chapter ~~4.5 - Natural Hazard~~ 4.14 - Landslide Hazard and Hillside Development Provisions. The conceptual grading plan shall also indicate how runoff and surface water from individual lots will be managed, and how the proposal's surface waters will be managed. Additionally, the conceptual grading plan for Residential Partitions shall meet the requirements in "c," and "d," below;

c) For residential development, excavation and grading shall maintain hydrology that supports existing wetland and riparian areas and the application shall demonstrate adherence;

d) For residential development, the graphics, including the conceptual grading plan, must demonstrate that each lot can be served by streets and infrastructure in a manner that is consistent with the clear and objective approval standards contained in the following: the City's development standards outlined in by the applicable underlying zoning designation standards in Article III of this Code; the development standards in Article IV of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; and the adopted City Off-street Parking Standards;

13. Where it is evident that the parcel can be further divided, the applicant shall show, either on the Tentative Plat or as an attachment, that the Partition will not preclude efficient division of land in the future;

14. Narrative Requirements -

a) Phasing - Statement describing phases of project, if proposed. Phases shall be:

1) For Nonresidential Partitions, substantially and functionally self-contained and self-sustaining with regard to access, parking, transportation facilities, utilities, Green Areas, and drainage without reliance on any uncompleted phase; capable of substantial occupancy, operation, and maintenance upon completion of construction and development, and be designed such that the phases support the infrastructure requirements for the project.

2) Designed to Address Compatibility -

a. For Nonresidential Partitions, addressing compatibility means arranging the phases to avoid conflicts between higher and lower density development.

b. For Residential Partitions, Uses permitted outright within a zone are considered to be compatible and not to conflict. Between zones, compatibility is addressed at the time the zone is established. A Residential Use permitted outright within an existing zone is considered to be compatible with Uses permitted outright within existing neighboring zones;

c. For Residential Partitions, each proposed phase must meet all required clear and objective standards for access, parking, transportation facilities, utilities, Green Areas, and drainage without reliance on any uncompleted phase. Each proposed phase, and the proposal as a whole, must be designed so that in addition to each proposed phase meeting all required infrastructure standards for that phase, at the completion of each phase all completed phases together will cumulatively meet all infrastructure standards that would be required for a project

consisting of the completed phases. The Partition and each phase must also be designed so that by completion of all proposed phases all the phases together will meet all infrastructure requirements for the project.

b) Explanation of how the proposal complies with the review criteria in Section 2.14.30.05; and

15. Traffic Impact Study -

a) Nonresidential Partitions - Any proposal generating 30 or more trips per hour shall include Level of Service (LOS) analysis for the affected intersections. A Traffic Impact Analysis (TIA) is required, if required by the City Engineer. The TIA shall be prepared by a registered professional engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures.

b) Residential Partitions - A Traffic Impact Analysis (TIA) is required. The TIA shall be prepared by a registered professional engineer, in accordance with the most current ITE standards, and shall address both current conditions and those within a 20-year horizon. The TIA shall quantify the trip generation effects of the proposal. The TIA shall estimate trip distribution patterns. Any proposal generating 30 or more trips per hour shall include Level of Service (LOS) analysis for the affected intersections. If any affected intersection LOS is or will fall be below LOS D during any hour, mitigation shall be proposed. The mitigation shall demonstrate that LOS D will be maintained for 20 years.

16. Information required by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable.

2.14.30.04 - Staff Evaluation

The application and any comments that have been received shall be reviewed to ensure consistency with the review criteria in Section 2.14.30.05 below.

2.14.30.05 - Review Criteria

Requests for approval of a Tentative Partition Plat shall be reviewed to ensure:

a. **Nonresidential Partitions** - Requests for the approval of a Tentative Partition Plat shall be reviewed to ensure:

1. Consistency with the purposes of this Chapter and the following: the City's development standards outlined in the applicable underlying Zoning Designation standards in Article III of this Code; the development standards in Article IV of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; the adopted City Off-street Parking Standards; and any other applicable policies and standards adopted by the City Council;

2. Pursuant to Comprehensive Plan Policy 3.2.7, demonstrated compatibility in the areas in "a," through "m," below, as applicable:

   a) Basic site design (the organization of Uses on a site and the Uses' relationships to neighboring properties);

   b) Visual elements (scale of potential development, etc.);

   c) Noise attenuation;

   d) Odors and emissions;

   e) Lighting;

   f) Signage;

   g) Landscaping for buffering and screening;

   h) Transportation facilities;

i) Traffic and off-site parking impacts;

j) Utility infrastructure;

k) Effects on air and water quality (note: a DEQ permit is not sufficient to meet this criterion);

l) Consistency with the applicable development standards, including the applicable Pedestrian Oriented Design Standards; and

m) Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards;

3. Approval does not impede future development of property under the same ownership or on adjacent lands planned for urban densities with respect to the provision of City services and access from a public street;

4. Consistency with the density requirements of the Zone. When calculating the applicable density range for a subject property, applicants may include in their acreage calculation 50 percent of the area of any streets that front the subject site, for the distance the streets front the subject site.; and

5. For properties with Natural Resources or Natural Hazards subject to Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Partition or Minor Replat shall create new lots or parcels unless each new and remaining lot or parcel contains:

a) An area unconstrained by Natural Resources or Natural Hazards;

b) An area that includes Formerly Constrained Areas; or

c) Contains an area that includes the areas in 5.a) and 5.b) above;

and that area is equal to or greater than the applicable Minimum Assured Development Area(s) for the zone or zones is which the site falls. Exceptions to this requirement are:

d) Lots created for public park purposes; and

e) Privately- or publicly-owned lots completely contained within an area zoned Conservation - Open Space.

New Partitions may contain common open space tracts for the purpose of protecting Natural Resources and/or avoiding Natural Hazards.

b. Residential Partitions - Requests for the approval of a Tentative Partition Plat shall be reviewed to ensure:

1. Consistency with the clear and objective approval standards contained in the following: the City's development standards outlined in the applicable underlying Zoning Designation standards in Article III of this Code; the development standards in Article IV of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; and the adopted City Off-street Parking Standards;

2. The following criteria are met for Residential Partitions and the application demonstrates adherence to them:

a) Approval will permit City services and access from a public street to be provided to property under the same ownership and on adjacent lands planned for urban densities;

b) Consistency with the density requirements of the zone. When calculating the applicable density range for a subject property, applicants may include in their acreage calculation 50 percent of the area of any streets that front the subject site, for the distance the streets front the subject site;

c) Preservation and/or protection of Significant Natural Features, consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Streets shall also be designed along contours, and structures shall be designed to fit the topography of the site to ensure compliance with these Code standards;

d) Land uses shall be those that are outright permitted by the existing underlying zoning designation;

e) Excavation and grading shall not change hydrology (in terms of water quantity and quality) that supports existing Locally Significant Wetlands and/or Riparian Corridors that are subject to this Code's Wetlands and/or Riparian Corridor provisions in Chapter 4.13 - Riparian Corridor and Wetland Provisions; and

f) For properties with Natural Resources or Natural Hazards subject to Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Partition or Minor Replat shall create new lots or parcels unless each new and remaining lot or parcel contains remaining lot or parcel contains:

1) An area unconstrained by Natural Resources or Natural Hazards;

2) An area that includes Formerly Constrained Areas; or

Approval does not relieve the applicant from other applicable provisions of this Code or from the Oregon Revised Statutes.

2.14.40.04 - Recording of Final Plat

When all required signatures have been obtained on the Final Partition Plat, the Director shall record the Plat and any required covenants with the County Recorder.

2.14.40.05 - Effective Date

Authorization of the Final Partition Plat shall become effective when the Plat is recorded by the Director.

2.14.40.06 - Notice of Recording

After the Final Partition Plat is recorded, the Director shall notify the applicant of the recording.

Section 2.14.50 - MINOR REPLAT PROCEDURES

a. An application for a Minor Replat shall be administered in accordance with the Tentative Partition Plat review procedures in Section 2.14.30.

b. A Final Minor Replat shall be prepared by an Oregon-licensed surveyor in accordance with Section 2.4.40 in Chapter 2.4 -Subdivision and Major Replats, with the exception that the Final Replat shall be signed by the Director instead of the Planning Commission Chair.

Section 2.14.60 - Property Line Adjustment

a. An application for a Property Line Adjustment shall be administered in accordance with the Tentative Partition Plat review procedures in Section 2.14.30, with the exception that the application shall be exempt from public notice provisions in Section 2.14.30.03 and the review criteria in Section 2.14.30.05;

b. A Property Line Adjustment shall be approved if the following criteria have been met:

1. The Property Line Adjustment shall not result in creation of an additional unit of land;

2. Any unit of land reduced in size by the Property Line Adjustment shall comply with all applicable zoning regulations;

3. The Property Line Adjustment shall not increase the degree of nonconformity that may exist on the subject lots; and

4. The availability of both public and private utilities and required access shall not be adversely affected by a Property Line Adjustment;

c. For properties with Natural Resources or Natural Hazards subject to Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, the Property Line Adjustment shall not adjust properties unless each resultant property contains an area unconstrained by Natural Resources or Natural Hazards and that area is equal to or greater than the applicable Minimum Assured Development Area(s) for the zone or zones is which the site falls. Exceptions to this requirement are:

1. Properties with public park purposes; and

2. Privately- or publicly-owned properties completely contained within an area zoned Conservation - Open Space.

d. Property Line Adjustments may not create new tracts. Where such tracts are proposed and/or required by this Code, a Land Division is required; and

e. Approvals shall be subject to the following minimum Conditions of Approval:

1. Deeds based on a metes and bounds legal description for all adjusted lots from the Property Line Adjustment shall be recorded with the Benton County Recorder's Office;

2. A Certified Boundary Survey map that reflects the approved Property Line Adjustment shall be reviewed by the City and signed by the Director and the City Engineer; The map shall then be filed with the County Recorder; and

3. Copies of the recorded deeds and filed survey map shall be provided to the City following recording.

Section 2.14.70 - MAJOR REPLATS

An application for a Major Replat shall be reviewed and processed in accordance with Chapter 2.4 - Subdivisions and Major Replats.

EXCERPT

CHAPTER 2.19
APPEALS

Section 2.19.10 - BACKGROUND

This Code is intended to permit flexibility in achieving the goals of the Comprehensive Plan. Some provisions of this Code, therefore, allow considerable discretion in decisions made by the City Council and its agencies and officers.

Criteria and standards have been adopted as part of this Code to ensure consistency in land use and limited land use decisions. To ensure due process it is also necessary to provide for review of land use and limited land use decisions that are perceived to be inconsistent with the Comprehensive Plan and/or the requirements of this Code.

Section 2.19.20 - PURPOSES

Procedures and requirements in this Chapter are established for the following purposes:

a. Provide an Appeal process wherein parties affected by land use decisions may request review of such decisions;

b. Establish the basis for valid Appeals;

c. Establish who may appeal a land use and limited land use decision; and

d. Provide for timely review of Appeals.

Section 2.19.30 - PROCEDURES

Appeals shall be filed and reviewed in accordance with the following procedures:

2.19.30.01 - General Provisions

a. Every decision relating to the provision of this Code substantiated by findings of every board, commission, committee, hearings officer, and official of the City is subject to review by Appeal in accordance with the provisions of this Chapter.

b. **Staying of Decisions** -

1. The filing of an Appeal to a higher level of City hearing authority, in accordance with the provisions of this Chapter, shall initiate the Appeal process and stay the order or decision appealed. The process shall include adequate public notice, a public hearing, and preparation of findings by the hearing authority that affirms, amends, or reverses the decision appealed.

2. A final decision by the City that is appealed to a state agency shall be stayed only through the relevant state procedures. When State procedures do not require the stay of a final decision, applicants may obtain development and/or site improvement permits. However, applicants will be proceeding at their own risk, pending the outcome of the Appeal.

c. All hearings on Appeals shall be held de novo (as a new public hearing). For any Appeal, the record of the decision made before the lower level of City hearing authority shall be part of the staff report on Appeal.

2.19.30.02 - Hearings Authority

a. Appeals of decisions of the Director shall be reviewed by the Land Development Hearings Board, except that:

1. Appeals of Historic Preservation Permit decisions by the Director shall be reviewed by the Historic Resources Commission;

2. Appeals of Residential Subdivision decisions by the Director shall be reviewed by the Planning Commission;

3. Appeals of Administrative District Change decisions by the Director shall be reviewed by the City Council. The definition of an Administrative District Change is contained within Section 2.2.50.b; and

4. Appeals of decisions made by the Director on Conceptual Plan Nullification requests on residentially zoned property shall be reviewed by the City Council.

b. Appeals of decisions of the Building Official that relate to the enforcement of this Code's requirements shall be reviewed by the Land Development Hearings Board.

c. Appeals of decisions by the City Engineer and the Floodplain Administrator shall be reviewed by the Land Development Hearings Board.

d. Appeals of decisions of the Planning Commission, the Land Development Hearings Board, or the Historic Resources Commission shall be reviewed by the City Council.

e. Appeals of decisions of the City Council shall conform with applicable ORS provisions, as amended.

2.19.30.03 - Standing

Appeals may only be filed by parties affected by a land use or limited land use decision. For purposes of this Chapter affected parties shall include any of the following:

a. The applicant or the applicant's authorized agent.

b. Any person who testified orally or in writing before the hearing authority whose decision is being appealed.

c. Any neighborhood organization that testified orally or in writing before the hearing authority whose decision is being appealed.

d. Any City agency, officer, or department that is responsible for provision of City facilities and services to the proposed development.

e. Ten registered voters who are City residents.

f. Any person who was mailed a copy of the Notice of Disposition for a Director-level Historic Preservation Permit.

g. Any person who is entitled to appeal a land use or limited land use decision pursuant to state law.

2.19.30.04 - Appeal Periods

Appeals must have been filed within 12 days after a decision is signed. In the case of a legislative interpretation of this Code or the Comprehensive Plan, an Appeal must have been filed within 12 days of a published Notice of such Interpretation. Appeals to the State Land Use Board of Appeals shall be made in accordance with the provisions of state law.

CHAPTER 3.1
LOW DENSITY (RS-3.5) ZONE

Section 3.1.10 - PURPOSE

This zone implements the Low Density Residential Comprehensive Plan designation, which allows from two to six dwelling units per acre. The RS-3.5 Zone is retained to provide land use and development standards for areas of the City that were zoned RS-3.5 and platted to urban densities as of December 31, 2006. Additionally, the RS-3.5 Zone is retained for areas of the City that were zoned RS-3.5 as of December 31, 2006, and are less than or equal to one acre in size. No new areas shall be zoned RS-3.5 and no existing zones shall be changed to RS-3.5.

Section 3.1.20 - PERMITTED USES

3.1.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. Residential Use Types - Family

2. Residential Building Types - Single Detached (one unit per lot or parcel)

3. Civic Use Types -

   a) Community Recreation

   b) Public Safety Services

b. Accessory Uses Permitted Outright

1. Accessory Dwelling Units subject to provisions in Section 4.9.40 of Chapter 4.9 - Additional Provisions

2. Colocated/attached Wireless Telecommunication Facilities on nonresidential structures that do not increase the height of the existing structures, subject to the standards in Chapter 4.9 - Additional Provisions.

3. Essential Services

		Standard
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Significant Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.1.40, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area and Private Outdoor Space	See Section 3.1.40, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.1.40 - GREEN AREA REQUIREMENTS

a. A minimum of 50 percent of the gross lot area shall be retained and improved or maintained as permanent Green Area, as defined in Chapter 1.6 - Definitions. A minimum of 15 percent of the gross lot area shall consist of vegetation consisting of landscaping or naturally preserved vegetation.

b. Landscaping within the required Green Area shall be permanently maintained in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Landscaping shall primarily consist of ground cover, ferns, trees, shrubs, or other living plants with sufficient irrigation to properly maintain all vegetation. Drought-tolerant plant materials are encouraged. Design elements such as internal sidewalks, pedestrian seating areas, fountains, pools, sculptures, planters, and similar amenities may also be placed within the permanent Green Areas.

c. Within the required Green Area for single-family dwellings, a Private Outdoor Space equal to at least 10 percent of the total lot area per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. These Private Outdoor Space requirements may be met by providing private side or rear yard areas, or patios.

Section 3.1.50 - COMPLIANCE WITH CHAPTER 4.10 - PEDESTRIAN ORIENTED DESIGN STANDARDS

The requirements in Chapter 4.10 - Pedestrian Oriented Design Standards shall apply to the following types of development in the RS-3.5 Zone:

a. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a nonresidential structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

Section 3.1.60 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.1.30 “m” through “q,”~~;~~ and “s,” variations from development and design standards such as standards in this Chapter and in other chapters of this Code that discuss parking, landscaping, public improvements, and Pedestrian Oriented Design Standards may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.2
LOW DENSITY (RS-5) ZONE

Section 3.2.10 - PURPOSE

This zone implements the Low Density Residential Comprehensive Plan designation, which allows from two to six dwelling units per acre. The RS-5 Zone is retained to provide land use and development standards for areas of the City that were zoned RS-5 and platted to urban densities as of December 31, 2006. Additionally, the RS-5 Zone is retained for areas of the City that were zoned RS-5 as of December 31, 2006, and are less than or equal to one acre in size.

The RS-5 Zone also applies to single-family residential areas greater than one acre in size and that were zoned RS-3.5 at the time of adoption of this Code. The RS-5 Zone is intended to provide opportunities for a broader range of lot sizes and Housing Types, consistent with Comprehensive Plan policies that support comprehensive neighborhoods and affordable housing.

Section 3.2.20 - PERMITTED USES

3.2.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> - Family

2. <u>Residential Building Types</u> -

   a) Single Detached

   b) Single Detached - Zero Lot Line

   c) Single Attached - Zero Lot Line, two units

   d) Attached - Townhouse, three units

   e) Duplex

   f) Multi-dwelling - Triplex only

		Standard
g.	Minimum Setbacks and Buffering from Actively Farmed Open Space-Agricultural (OS-AG) Land See also “k,” and “l,” below.	When residential development is proposed abutting Actively Farmed OS-AG Land, a minimum 50 ft.-wide continuous plant or plant/berm buffer is required. It is the applicant’s responsibility to provide this buffer. The minimum setback for lands adjacent to Actively Farmed OS-AG Land is 100 ft. Any intervening right-of-way may be included in the 100-ft. setback measurement. Structures that existed on December 31, 2006, and that would fall within the 100-ft setback from Actively Farmed OS-AG Land shall not be considered as non-conforming structures and no additional buffering is required to maintain the existing development.
h.	Maximum Structure Height	30 ft., not to exceed a solar envelope approved under Chapter 2.18 - Solar Access Permits, or Chapter 4.6 - Solar Access.
i.	Maximum Lot Coverage	50 percent of lot area maximum; interior attached townhouses exempt from this provision
j.	Off-street Parking	See Chapter 4.1 - Parking, Loading, and Access Requirements.
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - ~~Natural Hazard and Hillside Development~~ Floodplain Provisions.

		Standard
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.2.40, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area and Private Outdoor Space	See Section 3.2.40, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions

Section 3.2.40 - GREEN AREA REQUIREMENTS

a. A minimum of 50 percent of the gross lot area, and a minimum of 30 percent for center-unit townhouses on interior lots, shall be retained and improved or maintained as permanent Green Area, as defined in Chapter 1.6 - Definitions. A minimum of 15 percent of the gross lot area shall consist of vegetation consisting of landscaping or naturally preserved vegetation.

b. Landscaping within the required Green Area shall be permanently maintained in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Landscaping shall primarily consist of ground cover, ferns, trees, shrubs, or other living plants with sufficient irrigation to properly maintain all vegetation. Drought-tolerant plant materials are encouraged. Design elements such as internal sidewalks, pedestrian seating areas, fountains, pools, sculptures, planters, and similar amenities may also be placed within the permanent Green Areas.

c. Within the required Green Area for single-family dwellings (attached and detached) and duplexes, a Private Outdoor Space equal to at least 10 percent of the total lot area per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. Within the required Green Area for Multi-dwellings, a Private Outdoor Space equal to at least 48 sq. ft. per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. These Private Outdoor Space requirements may be met by providing private side or rear yard areas, patios, and/or balconies for dwelling units.

Section 3.2.50 - MIX OF HOUSING TYPES

A mix of permitted Housing Types is encouraged in the RS-5 Zone and shall be required for larger development projects in the zone. To promote such a mix, developments greater

than five acres in size shall comply with the variety of Housing Types requirements outlined in Chapter 4.9 - Additional Provisions.

Section 3.2.60 - COMPLIANCE WITH CHAPTER 4.10 - PEDESTRIAN ORIENTED DESIGN STANDARDS

The requirements in Chapter 4.10 - Pedestrian Oriented Design Standards shall apply to the following types of development in the RS-5 Zone:

a. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a nonresidential structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

Section 3.2.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.2.30 “m” through “q,”~~,~~ and “s,” variations from development and design standards, such as standards in this Chapter and in other chapters of this Code that discuss parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT
CHAPTER 3.3
LOW DENSITY (RS-6) ZONE

Section 3.3.10 - PURPOSE

This is the primary zone that implements the Low Density Residential Comprehensive Plan designation, which allows from two to six dwelling units per acre. The RS-6 Zone is intended to accommodate a broad range of lot sizes and varied Housing Types within the established density range. This variety is consistent with Comprehensive Plan policies that support comprehensive neighborhoods and affordable housing.

The RS-6 Zone also permits smaller lots than generally allowed in the RS-3.5 and RS-5 zones, and encourages greater efficiencies in the provision of streets, utilities, and usable Green Area.

The RS-6 Zone shall be applied to all lands zoned RS-6 as of the adoption of this Code. Additionally, the RS-6 Zone applies to single-family residential areas that are unplatted, greater than one acre in size, and that were zoned RS-5 at the time of adoption of this Code. With the exception of properties indicated on the Comprehensive Plan Map as being eligible for the RS-1 (Extra-low Density) Residential Zone, all Low Density Residential lands shall be zoned RS-6 (Low Density) Residential upon their annexation.

Section 3.3.20 - PERMITTED USES

3.3.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> -

   a) Family

   b) Group Residential - 12 or fewer persons

   c) Group Residential/Group Care - 12 or fewer persons

   d) Residential Care Facilities - 12 or fewer persons

2. <u>Residential Building Types</u> -

   a) Single Detached

		Standard
g.	Minimum Setbacks and Buffering from Actively Farmed Open Space-Agricultural (OS-AG) Land See also “k,” and “l,” below.	When residential development is proposed abutting Actively Farmed OS-AG Land, a minimum 50 ft.-wide continuous plant or plant/berm buffer is required. It is the applicant’s responsibility to provide this buffer. The minimum setback for lands adjacent to Actively Farmed OS-AG Land is 100 ft. Any intervening right-of-way may be included in the 100-ft. setback measurement. Structures that existed on December 31, 2006, and that would fall within the 100-ft setback from Actively Farmed OS-AG Land shall not be considered as non-conforming structures and no additional buffering is required to maintain the existing development.
h.	Maximum Structure Height	30 ft., not to exceed a solar envelope approved under Chapter 2.18 - Solar Access Permits or Chapter 4.6 - Solar Access
i.	Maximum Lot Coverage	60 percent of lot area maximum; interior attached townhouses exempt from this provision
j.	Off-street Parking	See Chapter 4.1 - Parking, Loading, and Access Requirements
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

		Standard
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.3.40, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area and Private Outdoor Space	See Section 3.3.40, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.3.40 - GREEN AREA REQUIREMENTS

a. A minimum of 40 percent of the gross lot area, and a minimum of 20 percent for center-unit townhouses on interior lots, shall be retained and improved or maintained as permanent Green Area, as defined in Chapter 1.6 - Definitions. A minimum of 15 percent of the gross lot area and a minimum of 10 percent for center-unit townhouses on interior lots, shall consist of vegetation consisting of landscaping or naturally preserved vegetation.

b. Landscaping within the required Green Area shall be permanently maintained in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and shall primarily consist of ground cover, ferns, trees, shrubs, or other living plants with sufficient irrigation to properly maintain all vegetation. Drought-tolerant plant materials are encouraged. Design elements such as internal sidewalks, pedestrian seating areas, fountains, pools, sculptures, planters, and similar amenities may also be placed within the permanent Green Areas.

c. Within the required Green Area for single-family dwellings (attached and detached) and duplexes, a Private Outdoor Space equal to at least 10 percent of the total lot area per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. Within the required Green Area for multi-dwellings, a Private Outdoor Space equal to at least 48 sq. ft. per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. These Private Outdoor Space requirements may be met by providing private side or rear yard areas, patios, and/or balconies for dwelling units.

Section 3.3.50 - MIX OF HOUSING TYPES

A mix of permitted Housing Types is encouraged in the RS-6 Zone and shall be required for larger development projects in the zone. To promote such a mix, developments greater

than five acres in size shall comply with the variety of Housing Types requirements outlined in Chapter 4.9 - Additional Provisions.

Section 3.3.60 - COMPLIANCE WITH CHAPTER 4.10 - PEDESTRIAN ORIENTED DESIGN STANDARDS

The requirements in Chapter 4.10 - Pedestrian Oriented Design Standards shall apply to the following types of development in the RS-6 Zone:

a. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a nonresidential structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

Section 3.3.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.3.30 “m” through “q,”~~;~~ and “s,” variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.4
MEDIUM DENSITY (RS-9) ZONE

Section 3.4.10 - PURPOSE

This zone is the primary zone that implements the Medium Density Residential Comprehensive Plan designation, which allows from six to 12 dwelling units per acre. It is intended to provide areas where single detached, single attached, duplex, triplex, and fourplex units, and townhouses may be constructed under various ownership patterns. The zone provides a higher density and more intensive use of land than the Low Density Residential zones. The RS-9 Zone is intended to achieve efficiencies in provision of streets and utilities, and to encourage provision of usable Green Area.

Section 3.4.20 - PERMITTED USES

3.4.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> -

   a) Family

   b) Fraternities and Sororities existing prior to December 31, 2006, in accordance with Section 3.4.60 below

   c) Group Residential - 12 or fewer persons

   d) Group Residential - more than 12 persons, existing prior to December 31, 2006, in accordance with Section 3.4.60 below

   e) Group Residential/Group Care - 12 or fewer persons

   f) Group Residential/Group Care - more than 12 persons, existing prior to December 31, 2006, in accordance with Section 3.4.60 below

   g) Residential Care Facilities - 12 or fewer persons

2. <u>Residential Building Types</u> -

   a) Single Detached

		Standard
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Area	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - ~~Natural Hazard and Hillside Development~~ Floodplain Provisions.
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.4.40, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area and Private Outdoor Space	See Section 3.4.40, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.4.40 - GREEN AREA REQUIREMENTS

a. A minimum of 30 percent of the gross lot area, and a minimum of 20 percent for center-unit townhouses on interior lots, shall be retained and improved or maintained as permanent Green Area to ensure that the 70 percent maximum lot/site coverage standard of Section 3.4.30 is met. A minimum of 15 percent of the gross lot area and a minimum of 10 percent for center-unit townhouses on interior lots shall consist of vegetation consisting of landscaping or naturally preserved vegetation.

b. Landscaping within the required Green Area shall be permanently maintained in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Landscaping shall primarily consist of ground cover, ferns, trees, shrubs, or other living plants with sufficient irrigation to properly maintain all vegetation. Drought-tolerant plant materials are encouraged. Design elements such as internal sidewalks, pedestrian seating areas, fountains, pools, sculptures, planters, and similar amenities may also be placed within the permanent Green Areas.

c. Within the required Green Area for single-family dwellings (attached and detached) and duplexes, a Private Outdoor Space equal to at least 10 percent of the total lot area per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. Within the required Green Area for multi-dwellings, a Private Outdoor Space equal to at least 48 sq. ft. per dwelling unit shall be designed to be viewable and accessed by the interior space via doors and windows. These Private Outdoor Space requirements may be met by providing private side or rear yard areas, patios, and/or balconies for dwelling units.

Section 3.4.100 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.4.30 “m” through “q,”~~;~~ and”s,” variations from development and design standards such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT
CHAPTER 3.5
MEDIUM DENSITY - UNIVERSITY (RS-9(U)) ZONE

Section 3.5.10 - PURPOSE

This zone implements the Medium Density Residential Comprehensive Plan designation, which allows from six to 12 dwelling units per acre. It is intended to provide areas where a variety of Building Types are permitted in close proximity to the University. This zone contains development standards and design options to help address compatibility issues associated with mixed residential uses.

Section 3.5.20 - PERMITTED USES

3.5.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> -

   a) Family

   b) Fraternities and Sororities existing prior to December 31, 2006, in accordance with Section 3.5.60 below

   c) Group Residential - 12 or fewer persons

   d) Group Residential - more than 12 persons, existing prior to December 31, 2006, in accordance with Section 3.5.60 below

   e) Group Residential/Group Care - 12 or fewer persons

   f) Group Residential/Group Care - more than 12 persons, existing prior to December 31, 2006, in accordance with Section 3.5.60 below

   g) Residential Care Facilities - 12 or fewer persons

2. <u>Residential Building Types</u> -

   a) Single Detached

   b Single Detached - Zero Lot Line

		Standard
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.5.40, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area and Private Outdoor Space	See Section 3.5.40, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.5.40 – GREEN AREA REQUIREMENTS

a. A minimum of 30 percent of the gross lot area and a minimum of 20 percent for center-unit townhouses on interior lots shall be retained and improved or maintained as permanent Green Area to ensure that the 70 percent maximum lot/site coverage standard of Section 3.5.30 is met. A minimum of 15 percent of the gross lot area and a minimum of 10 percent for center-unit townhouses on interior lots shall consist of vegetation consisting of landscaping or naturally preserved vegetation.

b. Landscaping within the required Green Area shall be permanently maintained in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Landscaping shall primarily consist of ground cover, ferns, trees, shrubs, or other

relation to the proposed structure. Elements of concern include roof style, off-sets in the building's exterior walls and in its roof, types of materials, and other architectural details.

Section 3.5.100 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.5.30 “m” through “q,”~~;~~ and “s,”variations from development and design standards such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be achieved through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT
CHAPTER 3.6
MEDIUM-HIGH DENSITY (RS-12) ZONE

Section 3.6.10 - PURPOSE

This is the primary zone that implements the Medium-high Density Residential Comprehensive Plan designation, which allows from 12 to 20 dwelling units per acre. It is intended to accommodate a wide variety of Housing Types and to serve as a transition area between lands with lower density and higher density residential designations.

Section 3.6.20 - PERMITTED USES

3.6.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. Residential Use Types -

    a) Family

    b) Group Residential

    c) Group Residential/Group Care

    d) Residential Care Facilities

    e) Fraternities and Sororities

2. Residential Building Types -

    a) Single Detached

    b) Single Detached - Zero Lot Line

    c) Single Attached - Zero Lot Line, two units

    d) Attached - Townhouse

    e) Duplex

		Standard
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.6.50, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area, Private Outdoor Space, and Common Outdoor Space	See Section 3.6.50, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.6.40 - MULTIPLE BUILDINGS ON ONE LOT OR SITE

To provide privacy, light, air, and access to the dwellings within the development, the following minimum standards shall apply to multiple residential buildings on a single lot or site in the RS-12 Zone:

a. Buildings with opposing windowed walls shall be separated by 20 ft.

b. Buildings with windowed walls facing buildings with blank walls shall be separated by 15 ft. However, no blank walls are allowed to face streets, sidewalks, or multi-use paths. See Chapter 4.10 - Pedestrian Oriented Design Standards.

in Chapter 4.1 - Parking, Loading, and Access Requirements, even if these requirements interfere with the redevelopment.

Section 3.6.80 - MIX OF HOUSING TYPES

A mix of permitted Housing Types is encouraged in the RS-12 Zone and shall be required for larger development projects in the zone. To promote such a mix, developments greater than five acres in size shall comply with the variety of Housing Types requirements outlined in Chapter 4.9 - Additional Provisions.

Section 3.6.90 - COMPLIANCE WITH CHAPTER 4.10 - PEDESTRIAN ORIENTED DESIGN STANDARDS

The requirements in Chapter 4.10 - Pedestrian Oriented Design Standards shall apply to the following types of development in the RS-12 Zone:

a. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a nonresidential structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

Section 3.6.100 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.6.30 “m” through “q,”~~;~~ and “s,” variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.7
MEDIUM-HIGH DENSITY - UNIVERSITY (RS-12(U)) ZONE

Section 3.7.10 - PURPOSE

This zone implements the Medium-high Density Residential Comprehensive Plan designation, which allows from 12 to 20 dwelling units per acre. It is intended to provide for Medium-high density housing near the University that is compatible with existing development and consistent with the purpose of the RS-12 Zone. This zone also contains development standards to help address compatibility issues associated with the North Campus Area.

Section 3.7.20 - PERMITTED USES

3.7.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> -

   a) Family

   b) Group Residential

   c) Group Residential/Group Care

   d) Residential Care Facility

   e) Fraternities and Sororities

2. <u>Residential Building Types</u> -

   a) Single Detached

   b) Single Detached - Zero Lot Line

   c) Single Attached - Zero Lot Line, two units

   d) Attached - Townhouse

   e) Duplex

		Standard
g.	Minimum Setbacks and Buffering from Actively Farmed Open Space-Agricultural (OS-AG) Land See also “k,” and “l,” below.	When residential development is proposed abutting Actively Farmed OS-AG Land, a minimum 50 ft.-wide continuous plant or plant/berm buffer is required. It is the applicant’s responsibility to provide this buffer. The minimum setback for lands adjacent to Actively Farmed OS-AG Land is 100 ft. Any intervening right-of-way may be included in the 100-ft. setback measurement. Structures that existed on December 31, 2006, and that would fall within the 100-ft setback from Actively Farmed OS-AG Land shall not be considered as non-conforming structures and no additional buffering is required to maintain the existing development.
h.	Maximum Structure Height	35 ft., not to exceed a solar envelope approved under Chapter 2.18 - Solar Access Permits or Chapter 4.6 - Solar Access.
i.	Maximum Lot Coverage	70 percent of lot area maximum; interior attached townhouses exempt from this provision. Green Area is calculated per lot.
j.	Off-street Parking	See Chapter 4.1 - Parking, Loading, and Access Requirements.
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

		Standard
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.7.50, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area, Private Outdoor Space, and Common Outdoor Space	See Section 3.7.50, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.7.40 - MULTIPLE BUILDINGS ON ONE LOT OR SITE

To provide privacy, light, air, and access to the dwellings within the development, the following minimum standards shall apply to multiple residential buildings on a single lot or site in the RS-12(U) Zone:

a. Buildings with opposing windowed walls shall be separated by 20 ft.

b. Buildings with windowed walls facing buildings with blank walls shall be separated by 15 ft. However, no blank walls are allowed to face streets, sidewalks, or multi-use paths. See Chapter 4.10 - Pedestrian Oriented Design Standards.

c. Buildings with opposing blank walls shall be separated by 10 ft. As stated in “b,” above, no blank walls are allowed to face streets, sidewalks, or multi-use paths. See Chapter 4.10 - Pedestrian Oriented Design Standards.

d. Building separation shall also apply to building projections such as balconies, bay windows, and room projections.

e. Buildings with courtyards shall maintain separation of opposing walls as listed in "a," through "c," above.

f. Where buildings exceed a length of 60 ft. or exceed a height of 30 ft., the minimum wall separation shall be increased. The rate of increased wall separation shall be one ft. for each 15 ft. of building length over 60 ft., and two ft. for each 10 ft. of building height over 30 ft.

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a nonresidential structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

3.7.90.02 - Additional Design Standards

a. **Building Roof** - Roofs shall be gabled or hip type roofs (minimum pitch 3:1) with at least a 30-in. overhang and using shingles or similar roof materials. Alternatives may be approved where the developer can demonstrate that abutting structures or the majority of structures within 300 ft. have roofs similar to what is proposed.

b. **Building Materials (Exterior Walls)** - Lap/horizontal siding or walls of brick, masonry, or stone shall be required. Alternatives may be approved where the developer can demonstrate that abutting structures or the majority of structures within 300 ft. use materials similar to what is proposed.

c. **Structure Features** - Development shall be designed to minimize negative visual impacts affecting the character of the neighborhood by considering the scale, bulk, and character of the nearby structures in relation to the proposed structure. Elements of concern include roof style, off-sets in the building's exterior walls and in its roof, types of materials, and other architectural details.

Section 3.7.100 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.7.30 “m” through “q.”~~,~~ and “s,” variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT
CHAPTER 3.8
HIGH DENSITY (RS-20) ZONE

Section 3.8.10 - PURPOSE

This is the primary zone that implements the High Density Residential Comprehensive Plan designation, which allows 20 or more dwelling units per acre. It is intended to provide areas for high density group residential dwelling units and other closely related and/or supportive uses in various areas within the City.

Section 3.8.20 - PERMITTED USES

3.8.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> -

   a) Family

   b) Group Residential

   c) Group Residential/Group Care

   d) Residential Care Facilities

   e) Fraternities and Sororities

2. <u>Residential Building Types</u> -

   a) Single Detached

   b) Single Detached - Zero Lot Line

   c) Single Attached - Zero Lot Line, two units

   d) Attached -Townhouse

   e) Duplex

   f) Multi-dwelling

		Standard
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Section 3.8.50, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Required Green Area, Private Outdoor Space, and Common Outdoor Space	See Section 3.8.50, below.
s.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

3.8.30.02 - Structure Height and Building Mass

a. Primary structures in the RS-20 Zone shall not exceed a height of 65 ft. or five stories, whichever is less.

b. Where a property in the RS-20 Zone abuts a property in the RS-9 or RS-9(U) Zone, the height of structures in the RS-20 Zone is limited to a maximum of 35 ft. within a distance of 20 ft. from the Medium Density Residential property. Where a street separates the land zoned RS-20 from the land zoned RS-9 or RS-9(U), this height restriction shall be in accordance with “d,” below. See Figure 3.8-1 - Required Height Transition Area When a Development is Zoned RS-20 and is Next to Land Zoned RS-9 or RS-9(U).

Section 3.8.70 - REDEVELOPMENT OF EXISTING OFFICES

Existing offices are Permitted Uses and may be redeveloped if desired. The redeveloped building may occupy the existing building envelope and shall meet the parking standards contained in Chapter 4.1 - Parking, Loading, and Access Requirements, even if these requirements interfere with the redevelopment.

Section 3.8.80 - MIX OF HOUSING TYPES

A mix of permitted Housing Types is encouraged in the RS-20 Zone and shall be required for larger development projects in the zone. To promote such a mix, developments greater than five acres in size shall comply with the variety of Housing Types requirements outlined in Chapter 4.9 - Additional Provisions.

Section 3.8.90 - COMPLIANCE WITH CHAPTER 4.10 - PEDESTRIAN ORIENTED DESIGN STANDARDS

The requirements in Chapter 4.10 - Pedestrian Oriented Design Standards shall apply to the following types of development in the RS-20 Zone:

a. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a nonresidential structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

Section 3.8.100 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.8.30 “m” through “q,”~~;~~ and “s,” variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.9

MIXED USE RESIDENTIAL (MUR) ZONE

Section 3.9.10 - PURPOSE

The Mixed Use Residential (MUR) Zone is established to increase housing opportunities in close proximity to designated commercial zones. The MUR Zone is intended primarily for development of multi-family housing at densities high enough to support the retail uses of the adjacent commercial zones and to provide residents with direct and convenient access to commercial services.

Varied Housing Types are encouraged in the MUR Zone. Small-scale retail, office, and service uses are also allowed when they are developed as part of a mixed-use building. Design standards for the MUR Zone emphasize intensive development with building orientation to the street, as described in Chapter 4.10 - Pedestrian Oriented Design Standards. These design standards are tailored to the type of use proposed, such as townhouse, multi-family, and/or mixed use.

Section 3.9.20 - GENERAL PROVISIONS - Establishment of the MUR Zone

The MUR Zone designation shall apply to lands identified as MUR on the Official Zoning Map as of December 31, 2006, except as amended in accordance with the provisions of this Chapter and Chapter 2.2 - Zone Changes. Through a legislative or quasi-judicial process consistent with Chapter 2.2 - Zone Changes and Chapter 2.0 - Public Hearings, the MUR Zone may also be applied to properties designated Medium-high Density or High Density Residential on the Comprehensive Plan Map.

The following locational and dimensional criteria apply to the MUR Zone.

a. Locational Criteria

The following locational criteria shall be applied to Zone Changes, in conjunction with Chapter 2.2 - Zone Changes and Chapter 2.0 - Public Hearings.

1. The MUR Zone designation shall be applied only to properties that are contiguous with property designated Commercial on the Comprehensive Plan Map;

2. The outer boundary of the MUR Zone shall extend no farther than 450 ft. (1.5 to 2 blocks) from the edge of the adjacent commercially designated property. Variations from this locational criteria may be

		Standard
i.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
j.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
k.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.
l.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
m.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
n.	Landscaping	See Section 3.8.60, below, and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
o.	Required Green Area, Private Outdoor Space, and Common Outdoor Space	See Section 3.8.60, below.
p.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.9.90 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.9.40.03 “j,” through “n.”~~,~~ and “p,” variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.10
EXTRA-LOW DENSITY RESIDENTIAL (RS-1) ZONE

Section 3.10.10 - PURPOSE

This Zone implements elements of the Low Density Comprehensive Plan designation. While the normal density range for the Low Density Residential Comprehensive Plan designation is two - six dwelling units per acre, this Extra-low Density Residential designation is limited to a density range of 0.5 to 2 dwelling units per acre. It is intended to provide an Extra-low Density Residential Zone with a full range of urban services only for areas having the following specific characteristics:

a. The property contains significant Natural Resources or Natural Hazards required to be protected under provisions of this Code;

b. The property is located within an area identified on the Comprehensive Plan Map as appropriate for the application of this Zone;

c. Such designation of the property will not inhibit extension of public facilities or services to other properties within the Urban Growth Boundary; and

d. The property is not necessary to satisfy the City's buildable lands needs.

Section 3.10.20 - PERMITTED USES

3.10.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> - Family

2. <u>Residential Building Types</u> - Single Detached

3. <u>Civic Use Types</u> -

   a) Community Recreation

   b) Public Safety Services

   c) Minor Utilities

h.	Maximum Structure Height	30 ft., not to exceed a solar envelope approved under Chapter 2.18 - Solar Access Permits or Chapter 4.6 - Solar Access.
i.	Maximum Building Site Coverage	60 percent or 15,000 sq. ft., whichever is less.
j.	Off-street Parking	See Chapter 4.1 - Parking Loading and Access Requirements.
k.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Residential Structures	Shall not be placed within any required setback area. When located outside a setback area, but within five to 10 ft. of a property line, such equipment shall be screened on all sides with a solid fence or wall at least one ft. higher than the equipment. When located outside a setback area, but greater than 10 ft. from a property line, such equipment requires no screening.
l.	Outdoor Components Associated with Heat Pumps and Similar Equipment for Nonresidential Structures	Shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
m.	Minimum Assured Development Area (MADA)	See Chapter 4.11 - Minimum Assured Development Area (MADA).
n.	~~Natural Hazards and Hillsides~~Special Flood Hazard Areas	See Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.
o.	Significant Vegetation	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting and Chapter 4.12 - Significant Vegetation Protection Provisions.
p.	Riparian Corridors & Locally Protected Wetlands	See Chapter 4.13 - Riparian Corridor and Wetland Provisions.
q.	Landscaping	See Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.
r.	Landslide Hazards and Hillsides	See Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.10.40 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.10.30 “m” through “q.”~~,~~ and “r,” variations from development and design standards, such as standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.11
PROFESSIONAL AND ADMINISTRATIVE OFFICE (P-AO) ZONE

Section 3.11.10 - PURPOSE

The Professional and Administrative Office (P-AO) Zone implements the Professional Office Comprehensive Plan designation. The P-AO Zone is intended to establish suitable urban areas for diversified office uses in concentrated centers and in appropriate isolated locations. Purposes of this zone also include the following:

a. Accommodate location of intermediate uses between residential zones and areas of more intense development;

b. Afford opportunities for employment and for business and professional services in close proximity to residential neighborhoods and transportation facilities;

c. Provide a range of compatible and supportive uses;

d. Promote user convenience and the conservation of energy; and

e. Establish development standards that ensure consistency with the Comprehensive Plan.

Section 3.11.20 - PERMITTED USES

3.11.20.01 - Ministerial Development

a. Prior Established Uses Permitted

1. Uses existing prior to and in compliance (e.g. not a Nonconforming Use Type) with the Code on December 31, 2006.

2. Uses permitted by the Code at the time of approval of a Conceptual or Detailed Development Plan overlying the subject property.

b. Primary Uses Permitted Outright

1. <u>Civic Use Types</u> -

   a) Administrative Services

   b) Parking Services

b) Ground-floor windows shall allow views from adjacent sidewalks into working areas or lobbies, pedestrian entrances, or display windows set into the wall. Display cases attached to the outside wall do not qualify. The bottom of windows shall be no more than four ft. above the adjacent exterior grade.

b. Windows on Commercial Stories above Ground Floors - Each facade on commercial stories above the ground floor and that face a street or other public area accessible to the public shall include at least 20 percent window coverage.

c. Structural Design Menu - A minimum of two of the following menu options shall apply:

1. Pitched roofs - minimum 4:12 pitch;

2. Transitional elements between public areas and structures such as landings, fences, foyers, patios, and gates;

3. Inner courtyard or atrium; and/or

4. Development that visually complements a residential neighborhood environment by using similar architectural style elements, such as vertical windows, and porches.

Section 3.11.50 - OFF-STREET PARKING FACILITIES

Off-street parking facilities shall be provided on the site of each use as described in Chapter 4.1 - Parking, Loading, and Access Requirements.

Section 3.11.60 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - ~~Natural Hazard and Hillside Development~~ Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.11.70 - VARIATIONS

EXCERPT

CHAPTER 3.14
NEIGHBORHOOD CENTER (NC) ZONE

Section 3.14.10 - PURPOSE

The Neighborhood Center (NC) Zone implements the Minor and Major Neighborhood Center Comprehensive Plan designations. The Neighborhood Center Zone is intended to provide for concentrations of Civic Uses, retail businesses, commercial and personal service activities, and residential/commercial mixed use developments in the core of comprehensive neighborhoods, as envisioned by the Comprehensive Plan.

Commercial Uses in Minor Neighborhood Centers are intended to serve neighborhood shopping and office needs. Commercial uses in Major Neighborhood Centers are intended to serve broader community shopping and office needs in addition to the needs of the nearby neighborhood. Both Minor and Major Neighborhood Centers are encouraged to the maximum extent possible to include Civic uses that support the nearby comprehensive neighborhood. In Major Neighborhood Centers, such civic uses may also serve a larger population.

The Neighborhood Center Zone also serves these purposes:

a. Locates a range of businesses within convenient walking and cycling distance of residential areas;

b. Ensures human-scale development oriented to pedestrian-friendly Shopping Streets;

c. Supports the use of alternative modes of transportation, including walking, riding transit, and bicycling;

d. Develops neighborhood cores at an appropriate human scale, while minimizing hazards, noise, traffic congestion, and other related effects of commercial concentrations;

e. Implements the Comprehensive Plan provisions for development of Minor and Major Neighborhood Commercial Centers by establishing Minor NC and Major NC Zones on the Official Zoning Map; and

f. Provides useful public spaces serving the neighborhood core and surrounding uses.

5. Lodging Services on the Ground Floor. However, access to adjacent or upper floors of such Uses is permitted via lobbies or common areas shared with other businesses; and

6. Lodge and Fraternal Assembly Uses on the Ground Floor. However, access to adjacent or upper floors of such Uses is permitted via lobbies or common areas shared with other businesses.

Section 3.14.60 - COMPLIANCE WITH THIS CODE

All development shall comply with applicable design standards and other provisions of this Code including all chapters in Article IV, unless more restrictive provisions are established in this Chapter. The Block Perimeter Standards established in Section 4.0.60.n of Chapter 4.0 - Improvements Required with Development shall apply to development on undeveloped sites and are encouraged to the maximum extent practicable on redevelopment of developed sites.

Section 3.14.70 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.14.80 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.14.70, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT
CHAPTER 3.15
RIVERFRONT (RF) ZONE

Section 3.15.10 - PURPOSE

The Riverfront (RF) Zone implements the Central Business Comprehensive Plan designation for a portion of the core downtown area. It is intended to provide an area for Commercial, Civic, and Residential Uses, and to merge downtown with the Riverfront Commemorative Park in a pedestrian-friendly, multi-use neighborhood that focuses on the river. While the Zone does not permit new Low Density Residential Building Types, it does encourage dwelling units in, or attached to, buildings containing commercial activities.

Development in the Riverfront Zone is intended to enhance public safety and the pedestrian experience by encouraging the presence of citizens 24 hours a day. Allowed Uses such as retail, office and restaurants with windows to the sidewalk, and a residential neighborhood promote the greatest public access and activity. Large-scale civic and cultural facilities are encouraged in the Riverfront Zone, provided the Uses and activities promote the basic function of the Zone. Such Uses shall be reviewed for their character and contribution to the viability of the Riverfront Zone and to the Central Business Zone, and may be reviewed under the procedures outlined in Chapter 2.12 - Lot Development Option or Chapter 2.5 - Planned Development, should variations to development standards be needed.

Safe, adequate, and convenient parking for employees, customers, and residents is desired through the use of on-street parking and parking facilities that are functionally and visually compatible with the pedestrian orientation of the area. Structured parking facilities are encouraged to promote Use densities that enhance the intended high level of neighborhood safety and pedestrian activity within the multi-use neighborhood. To the extent that they meet the other purposes of the RF Zone and other requirements of this Code, creative measures to provide needed parking within the RF Zone and potentially within the Central Business Zone are encouraged to foster community-preferred activities in the RF Zone.

Section 3.15.20 - GENERAL PROVISIONS

Establishment of the RF Zone -The provisions of the RF Zone shall apply only to properties designated RF on the Official Zoning Map, effective December 31, 2006.

a. Pole signs and monument signs are not permitted.

b. Internally illuminated signs are not permitted. Neon signs are permitted.

Section 3.15.90 - COMPLIANCE WITH THE RIVERFRONT COMMEMORATIVE PARK PLAN AND THIS CODE

All development shall comply with applicable design standards and other provisions of the Riverfront Commemorative Park Plan and associated graphics, adopted by the City Council on February 26, 1997, and as amended over time. All development shall also comply with the applicable design standards and other provisions of the Code including, but not limited to, all chapters in Article IV, unless the provisions in this Chapter are more restrictive.

The Block Perimeter Standards established in Section 4.0.60.n of Chapter 4.0 - Improvements Required with Development shall apply to development on undeveloped sites and are encouraged to the maximum extent practicable on redevelopment of developed sites.

If a design standard or other provision of the Riverfront Commemorative Park Plan conflicts with the standards of the Code, the Riverfront Commemorative Park Plan shall prevail.

3.15.100 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.15.110 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.15.100, variations from development and design standards, such as standards in this Chapter and other chapters of this Code that discuss parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.16
CENTRAL BUSINESS (CB) ZONE

Section 3.16.10 - PURPOSE

This zone implements the Central Business Comprehensive Plan designation. It is intended to provide an area for Commercial Uses, as well as Civic and Residential Uses, and to provide all basic services and amenities required to keep the downtown the vital center of our community. While the Zone does not permit new Low Density Residential Building Types, it is not intended to preclude dwelling units in buildings containing commercial activities.

Section 3.16.20 - PERMITTED USES

3.16.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Residential Use Types</u> -

   a) Family

   b) Group Residential

   c) Group Residential/Group Care

   d) Residential Care Facilities

2. <u>Residential Building Types</u> -

   a) Single Detached - existing prior to adoption of this Code

   b) Single Detached - Zero Lot Line - existing prior to adoption of this Code or when added to existing development on an underdeveloped site

   c) Single Attached - Zero Lot Line, two units - existing prior to adoption of this Code or when added to existing development on an underdeveloped site

   d) Duplex - existing prior to adoption of this Code or when added to existing development on an underdeveloped site

the provision and maintenance of at least a six ft.-wide weather protected area over the sidewalk along the entire frontage of the structure.

Section 3.16.40 - LANDSCAPING, SCREENING, AND LIGHTING

Landscaping, screening, and lighting shall be required, in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, except street trees shall be provided in accordance with the Downtown Tree Management Program contained in the Downtown Streetscape Plan, dated November 2, 1988.

Section 3.16.50 - OFF-STREET PARKING

Off-street parking shall be provided in accordance with Chapter 4.1 - Parking, Loading, and Access Requirements.

Section 3.16.60 - COMPLIANCE WITH CHAPTER 4.10 - PEDESTRIAN ORIENTED DESIGN STANDARDS

The requirements in Chapter 4.10 - Pedestrian Oriented Design Standards, shall apply to the following types of development in the CB Zone:

a. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a commercial or civic structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

3.16.70 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection

Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.16.80 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.16.70, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.17
CENTRAL BUSINESS FRINGE (CBF) ZONE

Section 3.17.10 - PURPOSE

The Central Business Fringe Zone implements the Central Business Comprehensive Plan designation and is intended to allow commercial activity necessary to support regional shopping facilities located in the Central Business Zone. Because of its unique location, site development in this area should contribute to a visually attractive entrance to the downtown area.

Section 3.17.20 - PERMITTED USES

Uses permitted in the CBF Zone shall be the same as those permitted in Chapter 3.16 - Central Business (CB) Zone except for the following:

a. All Residential Building Types listed in Chapter 3.16 - Central Business Zone, are Permitted Uses;

b. Any new Commercial Use shall require a Plan Compatibility Review in accordance with Chapter 2.13 - Plan Compatibility Review; and

c. Projections such as chimneys, spires, domes, and towers, not used for human occupancy exceeding 45 ft. in height, in accordance with Section 4.9.50 of Chapter 4.9 - Additional Provisions, shall require a Plan Compatibility Review in accordance with Chapter 2.13 - Plan Compatibility Review. If adjacent to an RS-3.5, RS-5, RS-6, RS-9 or RS-9(U) Zone, the threshold is 20 ft. above the height of the structure or 45 ft. in height, whichever is less. Note: Flagpoles are subject to height requirements in Section 4.7.70.b of Chapter 4.7 - Sign Regulations.

Section 3.17.30 - DEVELOPMENT STANDARDS

3.17.30.01 - Dimensional Requirements

a. **Lot Area** - There is no minimum lot area for any Civic, Commercial, or Industrial Use Type structure. The requirements for residential structures shall be in accordance with Chapter 3.9 - Mixed Use Residential (MUR) Zone.

b. **Setbacks** - The minimum setback for any Civic, Commercial, or Industrial Use Type shall be 10 ft. in any front or exterior side yard. Setbacks for

2. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

3. Independent or cumulative expansion of a commercial or civic structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

b. **Additional Requirement** - Additionally, pitched roofs, minimum 4:12 pitch, shall be used to retain the residential character of the area where there is a predominance of pitched roofs on 90 percent or more of the structures on the same block or adjacent .50 blocks.

Section 3.17.40 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Lanscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.17.50 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.17.40, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.19
MIXED USE COMMUNITY SHOPPING (MUCS) ZONE

Section 3.19.10 - PURPOSE

The Mixed Use Community Shopping (MUCS) Zone implements the Mixed Use Commercial Comprehensive Plan designation in areas located outside Neighborhood Center (NC) Zones and the Mixed Use General Commercial Zone. The MUCS Zone is applied to areas that are already largely developed, are mostly located between neighborhood centers, and are intended to transition to a more pedestrian- and human-scale environment.

The MUCS Zone is intended to provide for retail businesses and commercial and personal service activities of limited sizes, with larger Uses in the Major Neighborhood Center Zone, and mixed use developments, accommodating both pedestrian oriented Uses and a limited number of land uses that are more dependent on automobile circulation.

The MUCS Zone also serves these purposes:

a. Provides transitions from a linear pattern of commercial development toward a pedestrian-friendly environment;

b. Locates a range of complementary businesses close to each other;

c. Provides human-scale development to the greatest extent practicable;

d. Mitigates the adverse effects of automobile-oriented development on the pedestrian environment;

e. Supports the use of alternative modes of transportation, including walking, riding transit, and bicycling;

f. Minimizes hazards, noise, traffic congestion, and other related effects of commercial concentrations; and

g. Implements the Comprehensive Plan provisions for access management on Arterial Streets.

facilities or circulation facilities, such as driveways and queues, be allowed between the building front and the street.

1. Exceptions for Improved Pedestrian and Automobile Circulation - The maximum setback may be increased by 50 percent through a Conditional Development approval when the Planning Commission finds that an increased setback will provide for improved pedestrian circulation and safety and improved vehicular access management outside the public rights-of-way. For example, objectives for both pedestrians and vehicles can be met through the provision of shared driveways, connected parking lots, improved pedestrian connections between buildings and the street sidewalk, and internal connections between adjoining buildings.

2. Exceptions Granted through Conditional Development/Planned Development Review - In conformance with Section 3.19.20.01.c, the maximum setback may be increased to provide for the following features:

   a) Pedestrian amenities in conformance with Chapter 4.10 - Pedestrian Oriented Design Standards;

   b) An internal Shopping Street consistent with the requirements of Section 4.0.60.m of Chapter 4.0 - Improvements Required with Development;

   c) Protection of Significant Natural Features protected by Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; or

   d) Compliance with other Sections of this Code.

3. Exceptions for Interior Buildings - Buildings interior to a development site are exempt from this requirement, provided other buildings on the site meet the requirement.

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a commercial or civic structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

3.19.40.08 - Structure Height

No structure shall exceed 45 ft. in height.

3.19.40.09 - Monument Sign Exceptions

In cases where street visibility of a business in a conforming structure established prior to December 31, 2006, is significantly reduced due to new construction on adjacent property, and the 100-ft. minimum separation requirement for freestanding signs in Section 4.7.80.02.c of Chapter 4.7 - Sign Regulations otherwise precludes any street signage associated with the structure, a single monument sign a maximum of eight ft. high and 32 sq. ft. in area, which otherwise meets the requirements of Chapter 4.7 - Sign Regulations, is permitted.

Section 3.19.50 - COMPLIANCE WITH THIS CODE

All development shall comply with applicable design standards and other provisions of the Code including, but not limited to, all chapters in Article IV, unless the provisions in this Chapter are more restrictive. The Block Perimeter Standards established in Section 4.0.60.n of Chapter 4.0 - Improvements Required with Development shall apply to development on undeveloped sites and are encouraged to the maximum extent practicable on redevelopment of developed sites.

Section 3.19.60 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection

Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.19.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.19.60, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.20

MIXED USE GENERAL COMMERCIAL (MUGC) ZONE

Section 3.20.10 - PURPOSE

The Mixed Use General Commercial (MUGC) Zone implements the Mixed Use Commercial Comprehensive Plan designation in areas located outside the mixed use Neighborhood Center Zone and Mixed Use Community Shopping Zone. It is intended to provide areas for those commercial and related services and businesses that generally require extensive outside storage, are not Retail or Office Uses, or have characteristics with less pedestrian orientation than other commercial zones. Site and building design in the MUGC Zone is intended to comply with pedestrian- and human-scale policies of the Comprehensive Plan, while recognizing and providing for Uses that may conflict with pedestrian access and the character of the other commercial zones.

Section 3.20.20 - GENERAL PROVISIONS - Establishment of the MUGC Zone

Zone Changes to establish new MUGC Zones may be applied only to properties designated Mixed Use Commercial (MUC) on the Comprehensive Plan Map as of December 31, 2006, or as established though a subsequent or concurrent Comprehensive Plan Map Amendment. The MUGC Zone also may be applied through a legislative process in accordance with Chapter 2.0 - Public Hearings. The following locational and dimensional criteria shall apply to any new MUGC Zone.

a. **Locational Criteria** - The following locational criteria shall be applied to Zone Changes, in conjunction with Chapter 2.2 - Zone Changes.

1. The MUGC Zone shall have at least 50 ft. of frontage along a Collector or Arterial Street, as designated in the Corvallis Transportation Plan;

2. New MUGC Zones are discouraged from abutting land designated Low Density Residential on the Comprehensive Plan Map.

b. **Zone Size and Dimensions** - The minimum contiguous area for a new MUGC Zone is five acres. Additionally, when multiple lots or parcels are included, portions of individual lots or parcels at least one acre in size may be included, provided the size of the remainder of each lot or parcel is developable under its zone designation. Public street rights-of-way shall not count toward the total area of a zone.

3. Section 4.10.70.04 - “a,” through “c,” and “e;” and

4. Section 4.10.70.05 -

a) “a.1,” except that weather protection is required only at street-oriented entrances;

b) “b.1," through “b.3;"

c) “b.5," and “b.6," except that a minimum of 20 percent of the length and 10 percent of the ground-floor wall area of any street-facing facade shall contain windows and/or glass doors; and

d) “b.7.d,” and “b.7.e”.

b. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

c. Independent or cumulative expansion of a commercial or civic structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

Section 3.20.50 - COMPLIANCE WITH THIS CODE

All development shall comply with applicable design standards and other provisions of the Code including, but not limited to, all chapters in Article IV, unless the provisions in this Chapter are more restrictive. The Block Perimeter Standards established in Section 4.0.60.n of Chapter 4.0 - Improvements Required with Development shall apply to development on undeveloped sites and are encouraged to the maximum extent practicable on redevelopment of developed sites.

Section 3.20.60 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 -

FloodplainNatural Hazard and Hillside Development Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, and Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.20.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.20.60, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.21
MIXED USE TRANSITIONAL (MUT) ZONE

Section 3.21.10 - PURPOSE

This Zone implements the Mixed Use Transitional (MUT) Comprehensive Plan designation. The MUT Comprehensive Plan designation should be applied to existing industrial areas that are identified, through an area Refinement Plan, as being desirable for transition over time to less intensive Uses. The MUT Zone provides a mechanism to permit the introduction of new, less intensive Uses while allowing General and Intensive Industrial Uses to remain during an indefinite period of transition. It also addresses limitations on re-intensification of Uses that have previously transitioned from General or Intensive Industrial Uses to less intensive activities.

Key objectives of the MUT Zone include reducing conflicts between Industrial and less intensive Uses located nearby; providing an opportunity to develop a mix of non-industrial Uses in the Zone that are compatible with surrounding land uses; transitioning to new, less conflicting Uses; and achieving the transition in a way that is fair and preserves value and flexibility for the industrial businesses located within the MUT Zone.

Section 3.21.20 - GENERAL PROVISIONS

3.21.20.01 - Establishment of the MUT Zone

The MUT Zone may be applied to properties with an MUT designation on the Comprehensive Plan Map.

3.21.20.02 - Zone Size and Dimensions

The size of the MUT Zone shall be established through an area Refinement Plan. Public street rights-of-way shall not count toward the total area of the Zone.

Section 3.21.30 - PERMITTED USES

Land use in the MUT Zone shall conform to the list of Permitted Use Types in Table 3.21-1 - Permitted Use Types. Ministerial Development involving Use Types permitted outright are identified with a P. General Development involving Use Types subject to Chapter 2.13 - Plan Compatibility Review are identified with a PC. Special Development involving Use Types subject to Chapter 2.3 - Conditional Development and Chapter 2.5 - Planned Development are identified with a CD and a PD, respectively. Uses identified with an N are not permitted.

development or adjacent properties may be removed, consistent with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. However, this provision shall not conflict with the provisions outlined in Section 3.21.70. If there is a conflict, the provisions of Section 3.21.70 shall prevail.

d. Artificial lighting shall be arranged and constructed not to produce direct glare on adjacent residential properties, and shall be consistent with the lighting provisions in Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

3.21.70 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.21.80 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.21.70, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards for General and Intensive Industrial Zones, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.22

LIMITED INDUSTRIAL - OFFICE (LI-O) ZONE

Section 3.22.10 - PURPOSE

The Limited Industrial-Office (LI-O) Zone implements the Limited Industrial-Office Comprehensive Plan designation. It is intended to create and preserve areas where Limited Manufacturing, development oriented to the large-scale Office industry (rather than small-scale, single-use, stand-alone Office buildings) and related Use Types may locate, as defined and guided by this Chapter.

Ancillary or customarily incidental non-industrial and non-office Uses that support the Primary Use activity are permitted, such as Administrative, Sales, and Service Uses. Together, all of these Uses are intended to reduce potentially adverse effects from, and provide a buffer between, General Industrial Uses and non-industrial Uses such as Neighborhood Centers, Residential and Mixed Use zones, etc.). The LI-O Zone development standards and design guidelines are intended to ensure quality appearance at community gateways, consistent with the Comprehensive Plan.

Section 3.22.20 - GENERAL PROVISIONS - ESTABLISHMENT OF THE LI-O ZONE

Zone Changes to establish new LI-O Zones may be applied only to properties designated Light Industrial-Office (LI-O) on the Comprehensive Plan Map as of December 31, 2006, or as established through a subsequent or concurrent Comprehensive Plan Map Amendment. The LI-O Zone also may be applied through a legislative or quasi-judicial process in accordance with Chapter 2.0 - Public Hearings. The following locational and dimensional criteria shall apply to any new LI-O Zone.

a. Locational Criteria -

1. All portions of the LI-O Zone shall be located within 1/4 mile of existing or planned transit service, shall have at least 50 ft. of frontage along a Collector or Arterial Street, and/or shall be contiguous to a property that is zoned Industrial and that fronts onto a Collector or Arterial Street, as designated by the City's Transportation Plan; and

2. The LI-O Zone shall be located adjacent to an existing or planned General Industrial (GI) Zone, and function as a buffer between the GI Zone and adjacent non-industrial Uses;

OR

4.0.60.n of Chapter 4.0 - Improvements Required with Development shall apply to development on undeveloped sites and are encouraged to the maximum extent practicable on redevelopment of developed sites.

Section 3.22.60 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.22.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.22.60, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.23
LIMITED INDUSTRIAL (LI) ZONE

Section 3.23.10 - PURPOSE

This zone implements the Limited Industrial Comprehensive Plan designation. It is intended to create and preserve areas where Limited Manufacturing and related Use Types, described in Chapter 3.0 - Use Classifications, may locate. Limited Manufacturing Uses have few, if any nuisance characteristics. Also permitted are Accessory non-industrial Uses that support the Primary Use activity and are compatible with it, specifically Administrative, Sales, and Service Uses.

Section 3.23.20 - PERMITTED USES

3.23.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. <u>Civic Use Types</u> -

   Freestanding Wireless Telecommunication Facilities up to 60 ft. in height, subject to the standards in Chapter 4.9 - Additional Provisions

2. <u>Commercial Use Types</u> -

   a) Animal Sales and Services -

      1) Kennels

      2) Veterinary

   b) Technical Support Center - 20 or fewer employees per shift

   c) Telemarketing Center - 20 or fewer employees per shift

   d) Temporary Outdoor Markets

   e) Wholesaling, Storage, and Distribution - Light

3.23.30.05 - Performance Standards

Each Use, activity, or operation within this Zone shall comply with applicable local, state, and federal standards, and shall not create a nuisance because of odor, noise, vibration, dust, smoke or gas.

3.23.30.06 - Off-Street Parking Facilities

Off-street parking shall be provided in accordance with Chapter 4.1 - Parking, Loading, and Access Requirements.

Section 3.23.40 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.23.50 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.23.40, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.24
GENERAL INDUSTRIAL (GI) ZONE

Section 3.24.10 - PURPOSE

This is the primary zone that implements the General Industrial Comprehensive Plan designation. It is intended to provide appropriate locations for a variety of General Industrial Uses including Manufacturing and related activities with few, if any, nuisance characteristics. This zone prohibits Residential Uses except as authorized in Chapter 4.3 - Accessory Development Regulations.

Section 3.24.20 - PERMITTED USES

3.24.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. Civic Use Types -

   a) Major Services and Utilities

   b) Minor Utilities - with towers not exceeding 75 ft. in height, subject to standards in Chapter 4.9 - Additional Provisions

   c) Parking Services

   d) Public Safety Services

   e) Freestanding Wireless Telecommunication Facilities up to 120 ft. in height, subject to the standards in Chapter 4.9 - Additional Provisions.

2. Commercial Use Types -

   a) Agricultural Sales

   b) Agricultural Services

   c) Animal Sales and Services -

      1) Grooming - in conjunction with veterinary

3.24.30.07 - Special Provisions for Automotive and Equipment - Sales/Rentals, Light Equipment

The purpose of reviewing the Automotive and Equipment-Sales/Rentals, Light Equipment Use Type as a Conditional Use is to determine appropriateness of the Use at a specific site based on the following criteria:

a. The proposed site is needed due to a shortage of alternative sites that can accommodate this Use.

b. Permitting the Use will not significantly reduce the overall supply and diversity of industrial land or negatively affect the developability of the balance of adjacent industrial land. Approval shall not be granted if the property was part of a larger parcel within the last 12 months.

c. The site is a minimum of two acres and has frontage on an Arterial Street.

Section 3.24.40 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.24.50 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.24.40, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.25
INTENSIVE INDUSTRIAL (II) ZONE

Section 3.25.10 - PURPOSE

This is the primary zone that implements the Intensive Industrial Comprehensive Plan designation. It is intended to provide appropriate locations for intensive manufacturing activities that are characterized by their potential conflicts with residential and other land uses. Because this Zone does not specifically prohibit any types of Intensive Industrial Uses, all Intensive Industrial Uses are reviewed through a Conditional Development process.

Section 3.25.20 - PERMITTED USES

3.25.20.01 - Ministerial Development

a. Primary Uses Permitted Outright

1. Civic Use Types -

   a) Major Services and Utilities

   b) Minor Utilities - with towers not exceeding 75 ft. in height, subject to standards in Chapter 4.9 - Additional Provisions

   c) Parking Services

   d) Public Safety Services

   e) Freestanding Wireless Telecommunication Facilities up to 120 ft. in height, subject to the standards in Chapter 4.9 - Additional Provisions

2. Commercial Use Types -

   a) Agricultural Sales

   b) Agricultural Services

   c) Animal Sales and Services

      1) Auctioning

3.25.30.04 - Height of Structure

No structure shall exceed 75 ft. in height.

3.25.30.05 - Off-Street Parking Facilities

Off-street parking shall be provided in accordance with Chapter 4.1 - Parking, Loading, and Access Requirements.

Section 3.25.40 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.25.50 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.25.40, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.26
RESEARCH TECHNOLOGY CENTER (RTC) ZONE

Section 3.26.10 - PURPOSE

This zone implements the Industrial Use designation of the Comprehensive Plan. It is intended to provide locations for Research and Technology Uses in a campus-like setting. The RTC Zone is designed to accommodate educational, scientific, industrial, and business research, development, planning , testing, and training activities and non-polluting manufacturing activities. Supporting Commercial Uses not to exceed 20 percent of the gross floor area may be located in RTC projects. The RTC Zone establishes standards that address compatibility of the center with surrounding Uses.

Section 3.26.20 - GENERAL PROVISIONS

3.26.20.01 - Establishment of the RTC Zone

This Zone may be requested by an owner of property identified on the Comprehensive Plan Map as Limited Industrial, Limited Industrial-Office, General Industrial, General Industrial-Office, and Mixed Use Transitional areas. Establishment of this Zone requires a public hearing by the Planning Commission in conjunction with a Planned Development Overlay and a Conceptual Development Plan consistent with Chapter 2.5 - Planned Development.

The applicant has three years from date of approval of the Conceptual Development Plan to complete a Plan Compatibility Review and be issued a Building Permit for a Primary Use. If no Building Permit has been issued prior to the expiration date, the Conceptual Development Plan shall expire and a new Conceptual Development Plan approval shall be required prior to the issuance of Building Permits.

3.26.20.02 - Time Extension of Conceptual Development Plan Approval

Applications for additional one-year extensions may be filed in accordance with the following procedures:

a. An owner of property with an RTC Conceptual Development Plan may apply to have the Conceptual Development Plan approval extended beyond the three-year limit, provided that an application, on forms provided by the Director, is properly filed before the expiration of the Conceptual Development Plan.

1. All new buildings or structures for which a valid permit application has been submitted after December 31, 2006;

2. Developments subject to Conditional Development and/or Planned Development approval, as required by a Condition(s) of Approval(s); and

3. Independent or cumulative expansion of a commercial or civic structure in existence and in compliance with the Code on December 31, 2006, or constructed after December 31, 2006 pursuant to a valid Conceptual or Detailed Development Plan approved on or before December 31, 2006, shall comply with the pedestrian requirements of Chapter 4.10 - Pedestrian Oriented Design Standards as outlined in Section 4.10.70.01.

o. Section 3.27.50 - Design Guidelines and Standards of Chapter 3.27 - Mixed Use Employment (MUE) Zone shall apply to industrial development within an RTC site.

Section 3.26.50 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.26.60 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.26.50, variations from development and design standards, such as standards in this Chapter and in other chapters addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.27
MIXED USE EMPLOYMENT (MUE) ZONE

Section 3.27.10 - PURPOSE

This Zone introduces some Commercial and Residential Uses into areas with industrial designations on the Comprehensive Plan Map, while maintaining the City's supply of industrially designated lands. It is intended to provide a variety of employment uses, including Limited Industrial Uses and Commercial, Civic, and Residential Uses, at a scale appropriate to surrounding employment areas. Key objectives of the Mixed Use Employment Zone include:

a. Expand employment opportunities by allowing businesses to locate in a variety of locations;

b. Provide services for employees in close proximity to their work place;

c. Provide options for living, working, and shopping environments;

d. Facilitate more intensive use of land while minimizing potentially adverse impacts; and

e. Provide options for pedestrian oriented lifestyles.

Section 3.27.20 - GENERAL PROVISIONS - Establishment of the MUE Zone

The MUE Zone shall be applied to properties with industrial designations on the Comprehensive Plan Map or to lands designated through a quasi-judicial or legislative process. When the Zone is applied to parcels via the quasi-judicial Zone Change process, the proposal shall meet the Zone Change criteria of Section 2.2.40 in Chapter 2.2 - Zone Changes, and the following criteria for MUE Zone location, dimensions, and size.

a. Locational Criteria -

The following locational criteria shall be applied to Zone Changes, in conjunction with Chapter 2.2 - Zone Changes.

1. The MUE Zone shall be located in areas with lot sizes of generally less than 20 acres;

AND EITHER

c. The site design shall preserve healthy, mature trees on the site to the maximum extent practicable. Trees likely to create a hazard for the development or adjacent properties may be removed, consistent with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. However, this provision shall not conflict with the provisions outlined in Section 3.27.60. If there is a conflict, the provisions of Section 3.27.60 shall prevail.

d. Artificial lighting shall be consistent with the lighting provisions in Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

Section 3.27.60 - NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.27.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.27.60, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards for General and Intensive Industrial Zones, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT

CHAPTER 3.30
WILLAMETTE RIVER GREENWAY (WRG) OVERLAY

Section 3.30.10 - PURPOSE

The Willamette River Greenway is an Overlay that coincides with the adopted Greenway boundary and applies to all development permitted by the underlying zones. The objectives of this Overly and this Chapter are as follows:

a. Protect, conserve, enhance, and maintain the natural, scenic, historical, economic, and recreational qualities of lands along the Willamette River;

b. Maintain or improve air and water quality within the Greenway;

c. Implement goals and policies of the State's Willamette River Greenway Program as required by the Oregon Revised Statutes, as amended;

d. Implement policies of the City's Comprehensive Plan;

e. Establish standards and requirements for the use of lands within the Willamette River Greenway in the City of Corvallis;

f. Provide for review of any intensification of Use, change of Use, or development within the Greenway;

g. Increase and maintain public access to and along the Willamette River to create urban recreational opportunities, provide linkages to other transportation corridors, and provide for multiple use of urban land; and

h. Ensure development is consistent with flood water flow mitigation and management of a Natural Resource or Natural Hazard.

Section 3.30.20 - CONDITIONAL DEVELOPMENT

Development within this Overly, regardless of the classification in the underlying zone, requires Conditional Development approval in accordance with the provisions of Chapter 2.3 - Conditional Development. In addition to notification requirements of Chapter 2.0 - Public Hearings, written public notice and a Notice of Disposition shall be mailed to the Oregon Department of Parks and Recreation. Development as used in this Section includes change of Use, intensification of land, or intensification of Water-dependent or Water-related Uses, except for those activities listed as exemptions in

Section 3.30.30 below. Development also includes proposed increases in air discharges that require permit approval by the Oregon Department of Environmental Quality (DEQ).

Section 3.30.30 - EXEMPTIONS

The following development activities do not require Conditional Development approval, provided they are consistent with requirements of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, ~~and~~ the Natural Resource provisions of Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions:

a. Customary dredging and channel maintenance conducted under permit from the state;

b. Seasonal increases in gravel operations under permit from the state;

c. Erosion control operations not requiring a permit from the Oregon Department of State Lands and that constitute a reasonable emergency necessary for safety or the protection of property.

d. Scenic easements acquired under ORS 390.332, as amended, and their maintenance as authorized by that statute and ORS 390.368, as amended.

e. Addition or modification by public utilities for existing utility lines, wires, fixtures, equipment, circuits, appliances, and conductors.

f. Flood emergency procedures and the maintenance and repair of existing flood control facilities, provided the maintenance and repair of existing flood control facilities is consistent with Section 2.11.40.

g. Signs, markers, aids, and similar items, placed by a public agency to serve the public.

h. Residential Accessory Development (excluding structures), such as lawns, gardens, and play areas outside of the areas required to be protected by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, ~~and~~ the Natural Resource provisions of

Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

i. Storage of equipment or material associated with Permitted Uses, providing it complies with applicable provisions of this Code.

j. Minor repairs or alterations to an existing structure for which no Building Permit is required.

k. A change of Use of a building or other structure that does not substantially alter or affect the land or water upon which it is situated.

l. Landscaping consistent with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

m. Construction of driveways.

n. Maintenance and repair, usual and necessary for the continuance of an existing Use.

o. Reasonable emergency procedures necessary for the safety or protection of property.

p. Other activities similar to those listed in "a," through "o," above. The Director shall make such determinations and provide notice in accordance with Chapter 2.16 - Request for Interpretation.

Section 3.30.40 - REVIEW CRITERIA

Conditional Development within the Willamette Greenway Overlay may be approved only when the Planning Commission, after considering cumulative effects within the City's Greenway, finds that the development standards in Section 3.30.50 and the following criteria are met:

a. Public access to and along the river shall be provided to the maximum extent practicable and to the extent that public access does not interfere with established Uses on the property.

b. Significant Natural Hazards and Natural Resources shall be protected consistent with the requirements of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, ~~and~~ the Natural Resource provisions of Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

c. Significant natural and scenic areas, viewpoints, and vistas shall be preserved.

d. The quality of air, water, and land resources in the Greenway shall be protected to the maximum extent practicable.

e. The Minimum Assured Development Area (MADA) shall be consistent with Chapter 4.11 - Minimum Assured Development Area (MADA).

f. The natural vegetative fringe along the river shall be protected and enhanced to the maximum extent practicable to ensure scenic quality, protection of wildlife, protection from erosion, and screening of Uses from the river.

g. Any public Recreational Use or facility shall not substantially interfere with established Uses on adjoining property.

h. Maintenance of public safety and protection of public and private property, especially from vandalism and trespass, shall be provided to the maximum extent practicable.

i. Extraction of aggregate deposits shall be conducted in a manner designed to minimize adverse effects on water quality, fish and wildlife, vegetation, bank stabilization, stream flow, visual quality, noise, and safety, and to guarantee necessary reclamation.

j. Development, change, or intensification of Use shall provide the maximum possible landscaped area, open space, or vegetation between the activity and the river.

k. Development shall be sited to maximize distance from the river to the greatest extent practicable.

l. In applying "a," through "k," above, to development proposals within the Willamette River Greenway, consideration should be given to the provisions of this Code, Corvallis 2020 Vision Statement, Comprehensive Plan, Downtown Streetscape Plan, Riverfront Commemorative Park Plan, and other applicable City documents.

However, where conflicts arise, direction must be taken from the Corvallis Comprehensive Plan and this Code.

Section 3.30.50 - DEVELOPMENT STANDARDS

Proposed development within the Willamette Greenway Overlay shall comply with the following standards:

a. Site Modifications

1. Except as provided in Section 3.30.30, above, existing predominant topographical features of the bank line and escarpment shall be protected and maintained.

2. Disturbance necessary for construction or establishment of a Water-related or Water-dependent Use, as defined in Chapter 1.6 - Definitions, and measures necessary to reduce existing or potential bank and escarpment erosion, landslides, or flood hazard conditions may be permitted upon approval by the Director or Floodplain Administrator or designee. However, such activities shall be consistent with Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions.

3. Stability shall be assured considering the stress imposed on the bank and land area between the low water mark of the river and Top-of-bank.

4. The hydraulic and flood carrying capacity of the river and the hydraulic effect of the river on the bank shall be considered, and steps shall be taken to ensure minimal adverse effects by and upon the proposal, consistent with Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions.

5. The applicant shall demonstrate adherence to the provisions of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and the Natural Resource provisions of Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

6. If applicable, the applicant shall submit certification by a registered professional engineer that the standards specified in “2," and “3,” above, have been met. Where necessary to properly evaluate a proposal, an applicant may be required to furnish further studies such as a soils survey

and analysis, foundation study, or hydrologic study performed by competent professionals.

b. Landscaping, Natural Hazards, and Natural Resources - The following provisions shall apply:

1. All areas of the site within the WRG Overlay shall be landscaped and addressed consistent with the provisions of the underlying zone; and the provisions of Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Natural Hazard and Hillside Development Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, and Chapter 4.13 - Riparian Corridor and Wetland Provisions.

2. Required landscaped areas shall be continuously maintained, irrigated with permanent facilities sufficient to maintain the plant material, and covered by living plant material capable of attaining 90 percent ground coverage within three years. Required vegetation areas shall be subject to the provisions of Section 4.13.50.d. Landscaping and lighting shall be in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. If there is a conflict between the provisions of Section 4.13.50.d and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Section 4.13.50.d shall prevail.

3. Living plant materials shall be compatible with and enhance the riparian environment.

c. Structures - All buildings and structures, including supporting members, and all exterior mechanical equipment shall be screened, colored, or surfaced to blend with the riparian environment. Surfaces shall be nonreflective.

d. Signs and Graphics - In addition to compliance with applicable provisions relating to signs and graphics in Chapter 4.7 - Sign Regulations, no sign or graphic display inconsistent with the purposes of the Greenway shall have a display surface oriented toward or visible from the Willamette River.

e. Parking and Unenclosed Storage Areas

1. Parking, loading, and unenclosed storage areas located within the WRG Overlay shall be screened from the river to the extent practicable in accordance with Chapter 4.1 - Parking, Loading, and Access Requirements and Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

2. Parking, loading, and unenclosed storage areas located outside of but adjacent to the WRG Overlay shall be screened from such Overlay to the extent practicable.

f. **Greenway Setback** - Minimum building setback distances from the ordinary high water line of the Willamette River shall be as outlined in Table 3.30-1 - Minimum Setbacks.

Table 3.30-1 - Minimum Setbacks	
Area	**Minimum Setback**
1. Lands in the WRG Overlay from the northern City limits to the southern edge of 777 NE Second Street (Assessor Map No. 11-5-35AD, Tax Lot 3000)	20 ft. westerly from Top-of-bank
2. Lands in the WRG Overly from the southern edge of 777 NE Second Street (Assessor Map No. 11-5-35AD, Tax Lot 3000) to Harrison Street	50 ft. westerly from Top-of-bank
3. Lands in the WRG Overly between Harrison Street and B Street, at the Top-of-bank and including the existing bike path	A landscaping strip sufficient to separate the bike path, and consistency with the Riverfront Commemorative Park Plan
4. Lands in the WRG Overlay south of B Street to the southerly City limits	100 ft. westerly from Top-of-bank
Setback distances do not apply to Water-dependent Uses that require a river bank location, or Water-related Uses that require direct access to the river.	
None of the minimum setbacks in this table shall conflict with the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, or the Natural Resource provisions of Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Should a conflict arise, the stricter provision shall prevail.	

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EXCERPT

CHAPTER 3.36
OREGON STATE UNIVERSITY (OSU) ZONE

This Zone implements Comprehensive Plan policies that encourage coordination between the University and City in planning and review of campus development. Coordination with campus development is essential due to the physical size of the University and its related effects on City facilities and services. This Zone also coincides with the Public Institutional Comprehensive Plan designation for property generally within the OSU campus area. However, not all property within this Zone is owned by OSU; some parcels are privately owned.

In conjunction with this Zone, a Physical Development Plan for campus development was originally adopted in 1986 and has been revised periodically by the University. The most recent revision, which this Zone implements, is the Oregon State University Campus Master Plan (CMP), approved in 2004.

Section 3.36.10 – PURPOSE

The OSU Zone implements the provisions in OSU's 2004-2015 Campus Master Plan, which is the blueprint for campus development over the next decade.

The purpose of the OSU Zone is to:

a. Encourage coordination between the University and the City of Corvallis, especially in the areas of land use planning and reviewing campus development;

b. Facilitate University development;

c. Ensure compatibility of University development with surrounding areas;

d. Ensure adequacy of public utilities, parking, and transportation facilities;

e. Expedite the development review process; and

f. Create a mechanism to regulate development on campus consistent with the CMP.

c. A vegetative buffer with a minimum width of 20 ft. that consists of a mix of evergreen and deciduous trees and shrubs shall be established between the OSU property line and any proposed building, access, drive and/ or parking lot within the Transition Area along the northern boundary of Sector A, B and C from the western boundary of Sector A to 26th Street and for the College Inn site. This vegetative buffer will be required upon any redevelopment of existing parking lots and/or the razing and redevelopment of existing buildings.

d. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources -

Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. An exception to these requirements is that a Drainageway Management Agreement is allowed in lieu of a drainageway easement, as outlined in Section 3.36.50.07, below.

Section 3.36.50.07 – Drainageway Management Agreement

a. In lieu of drainageway dedications and/or easements for new development, expansion or redevelopment on parcels adjoining an open natural drainageway as per Chapter 4.13 - Riparian Corridor and Wetland Provisions, OSU shall provide a Drainageway Management Agreement (DMA) that meets the purposes cited in Section 4.13.10 and the policies of the City of Corvallis Stormwater Master Plan.

b. Drainageway widths and areas subject to the DMA shall be defined per Chapter 4.13 - Riparian Corridor and Wetland Provisions.

c. The DMA shall include but not be limited to the following objectives:

1. Establish that the DMA is between Oregon State University (OSU) and the City of Corvallis (CITY) to establish CITY maintenance access rights and to limit OSU development activities within the particular drainageway.

or a combination of these materials for those areas that are visible from a street, building, pedestrian access way, or are adjacent to a neighborhood.

c. All outdoor storage areas shall be screened with construction similar to the adjacent building or with landscaping, masonry walls, solid wood fencing, or a combination of these materials for those areas that are visible from a street, adjacent building, pedestrian access way, or are adjacent to a neighborhood.

Section 3.36.50.15 – Public, Private, and Franchise Utilities

a. All new utility distribution lines shall be underground.

b. Development requiring the installation of public utility improvements shall be reviewed and processed in accordance with Section 4.0.70 - Public Utility Requirements (or Installations), and Section 4.0.80 - Public Improvement Procedures.

c. Development within the City's combination sewer systems shall comply with the separation of storm drain from sanitary sewer system policy criteria in accordance with the City's Community Development Policy 1003.

d. Development occurring on a parcel fronting or adjacent to a drainageway identified in the City of Corvallis Stormwater Master Plan, shall be constructed in accordance with Section 3.36.50.07, ~~and~~ Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, and shall comply with the watershed management guidelines and policies identified in Chapter 5 of the City's Stormwater Master Plan.

e. Transformers and vaults not underground shall be screened consistent with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

f. An application that includes the installation of franchise utilities shall be reviewed and processed in accordance with Section 4.0.90 - Franchise Utility Installations of Chapter 4.0 - Improvements Required with Development.

g. Copies of complete As Builts shall be certified by the design engineer and shall be submitted to the City for approval for all new constructed public improvements.

EXCERPT

CHAPTER 3.37
AGRICULTURE-OPEN SPACE (AG-OS) ZONE

Section 3.37.10 - PURPOSE

This Zone is intended to implement the Open Space - Agriculture Comprehensive Plan Map designation and recognize areas within the City suitable for Agricultural Research Use and for Uses compatible with Agricultural and Horticultural Research Use Types. The characteristics of such Use Types typically result in preservation of large open space areas. Residential Uses are Accessory to the Primary Uses.

Section 3.37.20 - PERMITTED USES

3.37.20.01 - Ministerial Development

a. Primary Uses Permitted Outright -

1. Civic Use Types - Freestanding Wireless Telecommunication Facilities up to 60 ft. in height, subject to the standards in Chapter 4.9 - Additional Provisions

2. Agriculture Use Types -

   a) Animal Husbandry

   b) Aquaculture

   c) Horticulture, Cultivation, and Storage

   d) Research Facilities and Services - related to the Use Types in "a," through "c," above

   e) Row Field Crops

   f) Tree Crops

b. Accessory Uses Permitted Outright

1. Animal Sales and Services - Veterinary

2. Animal Waste Processing

b. **Setbacks** - A minimum building setback of 100 ft. shall be maintained adjacent to the existing residential development's property lines. Streets may be located within this 100-ft. setback area, provided the minimum 50 ft.-wide required plant or plant/berm buffer required by Section 3.37.50. "a," above, is provided between the street and the adjacent Actively Farmed OS-AG Lands.

Section 3.37.60 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 3.37.70 - VARIATIONS

Except as limited by provisions within the chapters listed in Section 3.37.60, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option.

EXCERPT
CHAPTER 3.38
CONSERVATION-OPEN SPACE (C-OS) ZONE

Section 3.38.10 - PURPOSE

This Zone may be applied to lands with any of the adopted Comprehensive Plan Map designations. It is intended to recognize high value Natural Resource and Natural Hazard areas within the City that are owned by public agencies or have been set aside by private owners. The purpose of this Zone is to limit development of such areas and maintain them in a near-natural state while, in some cases, allowing access to and through them for public infrastructure and/or enjoyment. Typically the existence of this Zone results in preservation of large open space areas. If desired, density may be transferred off property at the time that this Zone is applied, provided the area receiving the transfer is part of the same development site.

Section 3.38.20 - PERMITTED USES

3.38.20.01 - Ministerial Development

a. Primary Uses Permitted Outright -

1. <u>Conservation Uses</u> -

   a) Preservation and restoration of Natural Resource and/or Natural Hazard areas

   b) Provision of open space areas to protect Natural Resources and avoid Natural Hazards

   c) Preservation and restoration of Significant Shrubs, Significant Trees, and Significant Vegetation as defined in Chapter 1.6 - Definitions

   d) Preservation and restoration of Designated Historic Resources listed in the Corvallis Register of Historic Landmarks and Districts or the National Register of Historic Places

2. <u>Civic Uses</u> -

   a) Community Recreation - limited to:

      1) Trails and associated viewing stations

b. Accessory Uses Permitted Outright - Essential Services

3.38.20.02 - Special Development

Conditional Development - Subject to review in accordance with Chapter 2.3 - Conditional Development.

Community Recreation - Full range of Uses limited to Willamette Park. Elsewhere, Uses limited to interpretive centers.

Section 3.38.30 - PERFORMANCE STANDARDS

a. Each Use, activity, or operation within this Zone shall comply with applicable local nuisance and animal control ordinances, state and federal standards, and other provisions of this Code; and

b. Uses and improvements shall be designed and constructed to minimize adverse impacts to significant Natural Resources and Natural Hazards, in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

EXCERPT

CHAPTER 4.0
IMPROVEMENTS REQUIRED WITH DEVELOPMENT

Section 4.0.10 - PURPOSES

This Chapter provides general information regarding improvements required with development. It is intended to clarify timing, extent, and standards for improvements. In addition to the standards in this Chapter, standards for specific situations are contained in Chapter 2.11 - Floodplain Development Permit and Chapters 4.1 - Parking, Loading, and Access Requirements through Chapter 4.1~~3~~4 - ~~Riparian Corridor and Wetland~~ Landslide Hazard and Hillside Provisions. Finally, improvements required with development shall meet construction specification standards established by the City Engineer and amended over time.

Section 4.0.20 - TIMING OF IMPROVEMENTS

a. All improvements required by the standards in this Chapter shall be installed concurrently with development, as follows:

1. Where a Land Division is proposed, each proposed lot shall have required public and franchise utility improvements installed or secured prior to approval of the Final Plat, in accordance with the provisions of Section 2.4.40.08 of Chapter 2.4 - Subdivisions and Major Replats.

2. Where a Land Division is not proposed, the site shall have required public and franchise utility improvements installed or secured prior to occupancy of structures, in accordance with the provisions of Section 2.4.40.12 of Chapter 2.4 - Subdivisions and Major Replats.

b. Where specific approval for a phasing plan has been granted for a Planned Development and/or Subdivision, improvements shall be phased in accordance with that plan.

Section 4.0.30 - PEDESTRIAN REQUIREMENTS

a. Sidewalks shall be required along both sides of all streets, as follows:

1. Sidewalks on Local, Local Connector, and Cul-de-sac Streets - Sidewalks shall be a minimum of five ft. wide on Local, Local Connector, and Cul-de-sac Streets. The sidewalks shall be separated from curbs by a tree planting area that provides at least six ft. of separation between the sidewalk and curb, except that this separated tree planting area shall not be provided adjacent to sidewalks where they are allowed to be located within Natural Resource areas governed by Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions. This separated tree planting area shall also not be provided adjacent to sidewalks where they are allowed to be located within drainageway areas governed by regulations in Chapter 2.11 - Floodplain Development Permit

and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

2. Sidewalks on Arterial, Collector, and Neighborhood Collector Streets - Sidewalks along Arterial, Collector, and Neighborhood Collector Streets shall be separated from curbs by a planted area. The planted area shall be a minimum of 12 ft. wide and landscaped with trees and plant materials approved by the City. The sidewalks shall be a minimum of five ft. wide. An exception to these provisions is that this separated tree planting area shall not be provided adjacent to sidewalks where they are allowed to be located within Natural Resource areas governed by Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions. This separated tree planting area shall also not be provided adjacent to sidewalks where they are allowed to be located within drainageway areas governed by regulations in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

3. Sidewalk Installation Timing - The timing of the installation of sidewalks shall be as follows:

   a) Sidewalks and planted areas along Arterial, Collector, and Neighborhood Collector Streets shall be installed with street improvements.

   b) Except as noted in "c," below, construction of sidewalks along Local, Local Connector, and Cul-de-sac Streets may be deferred until development of the site and reviewed as a component of the Building Permit. However, in no case shall construction of the sidewalks be completed later than three years from the recording of the Final Plat. The obligation to complete sidewalk construction within three years will be outlined in a deed restriction on affected parcels and recorded concurrently with the Final Plat.

   c) Where sidewalks on Local, Local Connector, and Cul-de-sac Streets abut common areas, drainageways, or other publicly owned areas, or where off-site Local, Local Connector, and Cul-de-sac Street extensions are required and sufficient right-of-way exists, the sidewalks and planted areas shall be installed with street improvements.

b. **Safe and Convenient Pedestrian Facilities** - Safe and convenient pedestrian facilities that minimize travel distance to the greatest extent practicable shall be provided in conjunction with new development within and between new Subdivisions, Planned Developments, commercial developments, industrial areas, residential areas, transit stops, and neighborhood activity centers such as schools and parks, as follows:

in accordance with the sidewalk standards adopted by the City Engineer. This provision does not require a separated walkway system to collect drivers and passengers from cars that have parked on-site unless an unusual parking lot hazard exists.

c. Where a development site is traversed by or adjacent to a future trail linkage identified within either the Corvallis Transportation Plan or the Trails Master Plan, improvement of the trail linkage shall occur concurrently with development. Dedication of the trail to the City shall be provided in accordance with Section 4.0.100.d.

d. To provide for orderly development of an effective pedestrian network, pedestrian facilities installed concurrently with development of a site shall be extended through the site to the edge of adjacent property(ies).

e. To ensure improved access between a development site and an existing developed facility such as a commercial center, school, park, or trail system, the Planning Commission or Director may require off-site pedestrian facility improvements concurrently with development.

f. Prior to development, applicants shall perform a site inspection and identify any Contractor Sidewalk/street Stamps, sidewalk prisms, horse rings, and iron curbs that will be impacted by the development. If such a feature exists, it shall either be left in its current state as part of the existing sidewalk or street, or incorporated into the new sidewalk or street for the development site, as close as possible to its original location and orientation. Iron curbs shall be retained unless required to be removed or modified to comply with mandatory ADA standards. In such instances, the iron curb shall only be removed or modified to the minimum extent necessary to comply with the ADA standards.

g. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.40 - BICYCLE REQUIREMENTS

a. **On-street Bike Lanes** - On-street bike lanes shall be required on all Arterial, Collector, and Neighborhood Collector Streets and constructed at the time of street improvements.

b. **Safe and Convenient Bicycle Facilities** - Safe and convenient bicycle facilities that minimize travel distance to the greatest extent practicable shall be provided in conjunction with new development within and between new Subdivisions, Planned

Developments, commercial developments, industrial areas, residential areas, transit stops, and neighborhood activity centers such as schools and parks, as follows:

1. For the purposes of this Section, safe and convenient means bicycle facilities that are free from hazards and provide a direct route of travel between destinations.

2. Bicycle/pedestrian rights-of-way connecting Cul-de-sacs or passing through unusually long or oddly shaped blocks shall be a minimum of 15 ft. wide. Maintenance of the paved improvement shall be the responsibility of adjacent property owners. Additionally, a minimum of five ft. of landscaping shall be provided on either side of these bicycle/pedestrian facilities, in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting. Maintenance of the landscaping shall also be the responsibility of adjacent property owners.

c. **Widths for Pedestrian/Bicycle Facilities** - Adequate widths for pedestrian/bicycle facilities shall be provided in accordance with the following standards:

1. Where long term bicycle and pedestrian usage is expected to be relatively low, such as in a neighborhood rather than a community-wide facility, multi-use paths shall be eight ft. wide and aligned to ensure adequate sight distance.

2. The standard width for two-way multi-use paths shall be 10 ft.

3. In areas with projected high bicycle volumes or multiple use by bicyclists, pedestrians, and joggers, multi-use paths shall be 12 ft. wide.

d. To provide for orderly development of an effective bicycle network, bicycle facilities installed concurrently with development of a site shall be extended through the site to the edge of adjacent property(ies).

e. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.50 - TRANSIT REQUIREMENTS

a. Development sites located along existing or planned transit routes shall, where appropriate, incorporate transit stops and shelters into the site design. These improvements shall be installed in accordance with the guidelines and standards of the Corvallis Transit System.

b. Development sites at or near existing or planned transit stops shall provide safe, convenient access to the transit system, as follows:

1. All Commercial and Civic Use developments shall provide a prominent entrance oriented toward Arterial, Collector, and Neighborhood Collector Streets, with front setbacks reduced as much as possible to provide access for pedestrians, bicycles, and transit.

2. All developments shall provide safe, convenient pedestrian walkways between the buildings and the transit stop, in accordance with the provisions of Section 4.0.30.b.

c. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.60 - PUBLIC AND PRIVATE STREET REQUIREMENTS

a. Traffic evaluations shall be required of all development proposals in accordance with the following:

1. Any proposal generating 30 or more trips per hour shall include Level of Service (LOS) analyses for the affected intersections. A Traffic Impact Analysis (TIA) is required, if required by the City Engineer. The TIA shall be prepared by a registered professional engineer. The City Engineer shall define the scope of the traffic impact study based on established procedures. The TIA shall be submitted for review to the City Engineer. The proposed TIA shall reflect the magnitude of the project in accordance with accepted traffic engineering practices. The applicant shall complete the evaluation and present the results with an overall site development proposal.

2. If the traffic evaluation identifies Level of Service (LOS) conditions less than the minimum standard established in the Corvallis Transportation Plan, improvements and funding strategies mitigating the problem shall be considered concurrently with a development proposal.

b. Location of new Arterial, Collector, and Neighborhood Collector Streets shall conform to the Corvallis Transportation Plan.

c. Although through-traffic movement on new Local Connector and Local Streets usually is discouraged, this may not be practical for particular neighborhoods. Local Connector or Local Street designations shall be applied in newly developing areas based on review of a street network plan and, in some cases, a traffic study provided with the development application. The decision regarding which of these

k. Location, grades, alignments, and widths for all public and private streets shall be considered in relation to existing and planned streets, topographical conditions, public convenience and safety, and proposed land use. Where topographical conditions present special circumstances, exceptions to these standards may be granted by the City Engineer provided that the safety and capacity of the street network is not adversely effected. The following standards shall apply:

1. Grading plans are required and shall demonstrate that the proposal does not contain any grade changes (cuts or fills) that are inconsistent with the provisions of Chapter 4.~~5~~14 - ~~Natural~~ Landslide Hazard and Hillside Development Provisions. Cut and fill is measured vertically from natural grade. The grading plan shall identify all proposed cuts and fills and the associated grade changes in ft. to demonstrate adherence to this provision. Streets shall be designed along natural contours.

2. Location of streets in a development shall not preclude development of adjacent properties. Streets shall conform to planned street extensions identified in the Corvallis Transportation Plan and/or provide for continuation of the existing street network in the surrounding area.

3. Grades shall not exceed six percent on Arterial Streets, 10 percent on Collector and Neighborhood Collector Streets, and 15 percent on Local, Local Connector, and Cul-de-sac Streets.

4. As far as practicable, Arterial, Collector, and Neighborhood Collector Streets shall be extended in alignment with existing streets by continuation of the street centerline. When staggered street alignments resulting in T intersections are unavoidable, they shall leave a minimum of 200 ft. between the nearest edges of the two rights-of-way.

5. Local street intersections shall be located a minimum of 125 ft. from any other street intersection.

6. Centerline radii of curves shall not be less than 500 ft. on Arterial Streets; 300 ft. on Collector and Neighborhood Collector Streets; and 100 ft. on Local, Local Connector, and Cul-de-sac Streets.

7. Streets shall be designed to intersect at angles as near as practicable to right angles and shall comply with the following:

   a) The intersection of an Arterial, Collector, or Neighborhood Collector Street with another Arterial, Collector, or Neighborhood Collector Street shall have a minimum of 100 ft. of straight (tangent) alignment perpendicular to the intersection;

   b) The intersection of a Local, Local Connector, or Cul-de-sac Street with another street shall have a minimum of 50 ft. of straight (tangent) alignment perpendicular to the intersection;

c) Where right-angle intersections are not possible, exceptions may be granted by the City Engineer provided that intersections have a minimum corner radius of 20 ft. along the right-of-way lines of the acute angle; and

d) All intersections shall have a minimum curb corner radius of 20 ft.

8. Right-of-way and improvement widths shall be as specified in the Transportation Plan and Table 4.0-1 - Street Functional Classification System.

9. Where streets must cross protected Natural Resources or Natural Hazards, street widths shall be minimized by providing no on-street parking and no planting strips between the curb and the sidewalk on either side of the street. Parking bays may be allowed, provided they do not exceed one space per dwelling unit and provided they do not cause the development to exceed the amount of development allowed by the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

I. Where standards do not exist to address unusual situations, the Planning Commission or Director may require special design standards recommended by the City Engineer as Conditions of development Approval.

c. Off-site public utility extensions necessary to fully serve a development site and adjacent properties shall be constructed concurrently with development.

d. To provide for orderly development of adjacent properties, public utilities installed concurrently with development of a site shall be extended through the site to the edge of adjacent property(ies).

e. All required public utility installations shall conform to the City's adopted facilities master plans.

f. **Private on-site sanitary sewer and storm drainage facilities may be allowed, provided all the following conditions exist:**

1. Extension of a public facility through the site is not necessary for the future orderly development of adjacent properties;

2. The development site remains in one ownership and Land Division does not occur, with the exception of Land Divisions that may occur under the provisions of Section 4.0.60.d, above; and

3. The facilities are designed and constructed in accordance with the Uniform Plumbing Code and other applicable codes, and permits are obtained from the Development Assistance Center prior to commencement of work.

g. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.80 - PUBLIC IMPROVEMENT PROCEDURES

It is in the best interests of the community to ensure that public improvements installed in conjunction with development are constructed in accordance with all applicable City policies, standards, procedures, and ordinances. Therefore, before installing public water, sanitary sewer, storm drainage, streetlights, street, transit, bicycle, or pedestrian improvements, developers shall contact the City Engineer for information regarding adopted procedures governing plan submittal, plan review and approval, permit requirements, inspection and testing requirements, progress of the work, and provision of easements, dedications, and as-built drawings for installation of public improvements.

Whenever any work is done contrary to the provisions of this Code, the Director may order the work stopped via a written notice served on the persons performing the work or otherwise in charge of the work. The work shall stop until the Director authorizes that it proceed or authorizes corrective action to remedy existing substandard work.

Section 4.0.90 - FRANCHISE UTILITY INSTALLATIONS

These standards are intended to supplement, not replace or supersede, requirements contained within individual franchise agreements that the City has with providers of electrical power, telecommunication, cable television, and natural gas services, hereafter referred to as Franchise Utilities.

a. Where a Land Division is proposed, the developer shall provide Franchise Utilities to the development site. Each lot in a Subdivision shall have an individual service available or secured prior to approval of the Final Plat, in accordance with Section 2.4.40 of Chapter 2.4 - Subdivisions and Major Replats.

b. Where necessary and in the judgement of the Director, Franchise Utilities shall be extended through the site to the edge of adjacent property(ies) to provide for orderly development of adjacent properties.

c. **The developer shall have the option of choosing whether to provide natural gas or cable television service to the development site, provided that all of the following conditions exist:**

1. Extension of Franchise Utilities through the site is not necessary for the future orderly development of adjacent property(ies);

2. The development site remains in one ownership and Land Division does not occur, with the exception of Land Divisions that may occur under the provisions of Section 4.0.60.d, above; and

3. The development is nonresidential.

d. Where a Land Division is not proposed, the site shall be provided with Franchise Utilities prior to occupancy of structures as required by this Section and in accordance with the provisions of Section 2.4.40.12 of Chapter 2.4 - Subdivisions and Major Replats.

e. All Franchise Utility distribution facilities installed to serve new development shall be placed underground except as provided below.

1. Poles for traffic signals, pedestals for police and fire system communications and alarms, pad-mounted transformers, pedestals, pedestal-mounted terminal boxes and meter cabinets, concealed ducts, substations, or facilities used to carry voltage higher than 35,000 volts; and

2. Overhead utility distribution lines may be permitted upon approval of the City Engineer when unusual terrain, soil, or other conditions make underground installation impracticable. Location of such overhead utilities shall follow rear or side lot lines wherever feasible.

f. The developer shall be responsible for making necessary arrangements with Franchise Utility providers for provision of plans, timing of installation, and payment for services

installed. Plans for Franchise Utility installations and plans for public improvements shall be submitted together to facilitate review by the City Engineer.

g. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.100 - LAND FOR PUBLIC PURPOSES

a. Easements for public sanitary sewer, water, storm drain, streetlight, transit, pedestrian and bicycle facilities shall be provided whenever these facilities are located outside a public right-of-way. The minimum easement width for a single utility is 15 ft. The minimum easement width for two adjacent utilities is 20 ft. The easement width shall be centered on the utility to the greatest extent practicable. Wider easements may be required for unusually deep facilities.

b. Utility easements with a minimum width of seven ft. shall be granted to the public adjacent to all street rights-of-way for franchise utility installations.

c. Where a development site is traversed by a drainageway or water course, improvements shall be in accordance with the Corvallis Storm Water Master Plan and the Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

d. Where a development site is traversed by, or adjacent to, a future trail linkage identified in the Corvallis Transportation Plan or the Trails Master Plan, dedications of suitable width to accommodate the trail linkage shall be provided. This width shall be determined by the City Engineer, based on the appropriate standard for the type of trail facility involved.

e. Where street, trail, utility, or other rights-of-way and/or easements in or adjacent to development sites are nonexistent or of insufficient width, dedications may be required. The need for and widths of those dedications shall be determined by the City Engineer.

f. Easements or dedications required in conjunction with Land Divisions shall be recorded on the Final Plat. For developments not involving a Land Division, easements and/or dedications shall be recorded on standard forms provided by the City Engineer.

g. Environmental assessments shall be provided by the developer (grantor) for all lands to be dedicated to the public or City. An environmental assessment shall include information necessary for the City to evaluate potential liability for environmental hazards, contamination, or required waste cleanups related to the dedicated land. An environmental assessment shall be completed prior to the acceptance of dedicated lands, in accordance with the following:

1. The initial environmental assessment shall detail the history of ownership and general use of the land by past owners. Upon review of this information, as well as any site investigation by the City, the Director will determine if the risks of potential contamination warrant further investigation. If further site investigation is warranted, a Level I Environmental Assessment shall be provided by the grantor, as described in “2," below.

2. Level I Environmental Assessments shall include data collection, site reconnaissance, and report preparation. Data collection shall include review of Oregon Department of Environmental Quality records, City and County fire department records, interviews with agency personnel regarding citations or enforcement actions issued for the site or surrounding sites that may impact the site, review of available historic aerial photographs and maps, interviews with current and available past owners of the site, and other data as appropriate.

   Site reconnaissance shall include a walking reconnaissance of the site to check for physical evidence of potentially hazardous materials that may impact the site. Report preparation shall summarize data collection and site reconnaissance, assess existing and future potential for contamination of the site with hazardous materials, and recommend additional testing if there are indications of potential site contamination. Level I Environmental Assessment reports shall be signed by a registered professional engineer.

3. If a Level I Environmental Assessment concludes that additional environmental studies or site remediation are needed, no construction permits shall be issued until those studies are submitted and any required remediation is completed by the developer and/or owner. Additional environmental studies and/or required remediation shall be at the sole expense of the developer and/or owner. The City reserves the right to refuse acceptance of land identified for dedication to public purposes if risk of liability from previous contamination is found.

h. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and Chapter~~ 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.0.110 - MAIL DELIVERY FACILITIES

a. Placement of mail delivery facilities shall consider locations of sidewalks, bikeways, intersections, existing or future driveways, existing or future utilities, right-of-way and street width, and vehicle, bicycle and pedestrian movements. Where mail delivery facilities are being installed in conjunction with a Land Division, their placement shall be indicated on the plans for public improvements and meet the approval of the City Engineer and the U.S. Post Office.

b. Where mail delivery facilities are proposed for installation in areas with an existing or future curbside sidewalk, a sidewalk transition shall be provided that maintains the required design width of the sidewalk around the mail delivery facility. If the right-of-way width will not accommodate the sidewalk transition, a sidewalk easement shall be provided adjacent to the right-of-way.

c. Mail delivery facilities and associated sidewalk transitions, when sidewalk transitions are necessary, around these facilities shall conform with the City's standard construction specifications. Mailboxes shall conform with the U.S. Post Office standards for mail delivery facilities.

d. Installation of mail delivery facilities is the obligation of the developer. These facilities shall be installed concurrently with the public improvements. Where development of a site does not require public improvements, mail delivery facilities shall be installed concurrently with private site improvements.

Section 4.0.120 - PONDING AREAS AND FLOOD HAZARDS

Ponding and flood hazards inside Special Flood Hazard Areas shall comply with the provisions in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions. For ponding or flood hazards outside Special Flood Hazard Areas, the following shall apply:

a. Areas subject to ponding of surface water or flooding shall not be developed until necessary measures have been taken to mitigate the situation. Such measures may be required by the Planning Commission or the Director as conditions of development approval.

b. The developer shall submit proposed mitigation measures to the City Engineer for review. The City Engineer shall report to the Planning Commission or the Director on the adequacy of the proposed mitigation measures.

c. Existence of a ponding area or flood hazard may be cause for revision of the development proposal or denial of the requested development.

4.0.130 - STORM WATER MANAGEMENT MEASURES

a. To reduce the risk of causing downstream properties to become flooded and to help maintain or restore the Properly Functioning Conditions of receiving waters, new development, expansions to existing development, or redevelopment shall be required to provide storm water detention and retention in accordance with “b,” of this Section.

EXCERPT

CHAPTER 4.1
PARKING, LOADING, AND ACCESS REQUIREMENTS

Section 4.1.10 - PURPOSES

The regulations in this Chapter are established to provide appropriate location and design of parking and loading areas and appropriate location, design, and capacity of accesses. The parking requirements are intended to provide sufficient parking in close proximity to the various Uses for residents, customers, and/or employees; and to maintain traffic carrying capacity of nearby streets. These regulations apply to both motorized vehicles, hereafter called vehicles, and bicycles.

Section 4.1.20 - GENERAL PROVISIONS

a. **Provision and Maintenance** - The provision of required off-street parking for vehicles and bicycles, and loading facilities for vehicles, is a continuing obligation of the property owner. Building or other Permits will only be issued after receipt of site plans drawn to a suitable scale and showing the location of permanent parking and loading facilities. New vehicle and bicycle parking spaces shall be provided in accordance with the provisions of this Code.

b. **Unspecified Requirements** - Vehicle and bicycle parking requirements for Uses not specified in this Chapter shall be determined by the Director based upon the requirements of similar Uses.

c. **New Structures** - When a structure is constructed, on-site vehicle and bicycle parking and loading spaces shall be provided in accordance with Section 4.1.30 below.

d. **Alteration of Existing Structures** - When an existing structure is altered to the extent that the existing Use is intensified, vehicle and bicycle parking shall be provided in the amount required for such intensification.

When increased intensity requires no more than two additional vehicle and/or bicycle spaces, no additional parking facilities shall be required. However, the effects of changes, additions, or enlargements shall be cumulative, and when the net effect of one or more changes generates a need for more than two spaces, they shall be provided in accordance with the provisions of this Chapter. Additional spaces shall be required for the intensification but not for the original Use. New vehicle and bicycle parking spaces shall be provided in accordance with the provisions of this Code.

e. **Change in Use** - No additional parking shall be required when an existing structure is changed from one Use Type to another, as listed in Section 4.1.30, and the vehicle and bicycle parking requirements for each Use Type are the same. When the change in Use requires no more than two additional vehicle and/or bicycle spaces, no additional parking facilities shall be required. However, where a change in Use results in a requirement for more than two additional vehicle and/or bicycle parking spaces, additional parking space shall be provided to compensate for the

off-street vehicle parking required by Section 4.1.30, below, except as provided in "p," below, and in Section 4.1.30.g.3.b.

p. **Structured Parking Required** - For commercial, office, and industrial development with vehicle parking in excess of the minimum required, up to 200 unstructured vehicle parking spaces shall be allowed for each of the first three stories of structures within the development site, not to exceed the maximum parking allowed in "o," above. All non-required vehicle parking in excess of the 200 per story shall be located in underground or structured parking facilities. In such cases, the parking maximum may be increased to 50 percent in excess of the minimum off-street vehicle parking required by Section 4.1.30 below. When multiple structures are located on an individual development site, the parking associated with each floor of all structures on the development site shall be added together when calculating the threshold of 200 spaces per story in this provision. For this Section, required handicapped spaces do not count toward the minimum parking requirement.

q. **Parking Reduction Allowed** -

1. A reduction of up to 10 percent of required vehicle parking may be allowed if a transit stop, developed consistent with Corvallis Transit System guidelines and standards, is located on-site or within 300 ft.

2. A reduction of up to 10 percent of required vehicle parking may be obtained through the provision of bicycle parking as follows:

   a) For every eight required bicycle parking spaces, required vehicle parking may be reduced by one space, up to the maximum of a 10 percent vehicle parking reduction; or

   b) For every four additional bicycle parking spaces provided over the minimum requirement, required vehicle parking may be reduced by one space, up to the maximum of a 10 percent vehicle parking reduction. Fifty percent of these additional bicycle parking spaces shall be covered, consistent with Section 4.1.70.d.1.

   Additional reductions of vehicle parking spaces may be granted through the procedures in Chapter 2.12 - Lot Development Option or Chapter 2.5 - Planned Development.

r. **Handicapped Parking Exception** - Required handicapped spaces do not count toward the maximum parking spaces allowed pursuant to Sections 4.1.20.o and 4.1.20.p, above.

s. **Compliance with Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources Provisions** - Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions,

Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Section 4.1.30 - OFF-STREET PARKING REQUIREMENTS

Minimum parking requirements for Use Types in all areas of the City, with the exception of the Central Business (CB) Zone and the Riverfront (RF) Zone, are described in Sections 4.1.30.a through 4.1.30.f. Minimum parking requirements for the Central Business (CB) Zone are described in Section 4.1.30.g.

a. Residential Uses Per Building Type -

1. Single Detached and Single Attached - Zero Lot Line, and Manufactured Homes -

   a) Vehicles - Two spaces per dwelling unit.

   b) Bicycles - None required.

2. Duplex, Attached, and Multi-dwelling -

   a) Vehicles -

      1) Studio or Efficiency Unit - One space per unit.
      2) One-bedroom Unit - One space per unit.
      3) Two-bedroom Unit - 1.5 spaces per unit.
      4) Three-bedroom Unit - 2.5 spaces per unit.

   b) Bicycles -

      1) Studio or Efficiency Unit - One space per unit.
      2) One-bedroom Unit - One space per unit.
      3) Two-bedroom Unit - 1.5 spaces per unit.
      4) Three-bedroom Unit - Two spaces per unit.

   The required bicycle parking may be located within a structure, in accordance with the provisions of Section 4.1.70.

3. Group Residential -

   a) Vehicles -

      1) Fraternities, Sororities, Cooperatives, and Boarding Houses - Three spaces per five occupants at capacity, with capacity to be based on criteria set forth in the Oregon Structural Specialty Code.

EXCERPT

CHAPTER 4.2
LANDSCAPING, BUFFERING, SCREENING, AND LIGHTING

Section 4.2.10 - PURPOSES

The City recognizes the aesthetic and economic value of landscaping and encourages its use to establish a pleasant community character, unify developments, and buffer or screen unsightly features; to soften and buffer large-scale structures and parking lots; and to aid in energy conservation by providing shade from the sun and shelter from the wind. The community desires and intends all properties to be landscaped and maintained.

This Chapter prescribes standards for Landscaping, Buffering, Screening, and Lighting. While this Chapter provides standards for frequently encountered development situations, detailed planting plans and irrigation system designs, when required, shall be reviewed by the City with this purposes clause as the guiding principle.

Section 4.2.20 - GENERAL PROVISIONS

a. Required Landscaping -

1. Landscaping and Irrigation Plans - Where a landscape plan is required by this Code, by a particular proposal, and/or by Conditions of Approval, detailed planting plans, irrigation plans and other related plans shall be submitted for review and approval with Building Permit applications and/or prior to the recordation of a Final Plat, as applicable. Building Permits, including Foundation Permits, shall not be issued until the Director has determined that the plans comply with the purposes clause and specific standards in this Chapter, any specific proposal(s), and/or Conditions of Approval that apply to the particular project. On a case by case basis, and where no Significant Natural Features would be impacted, the Director may grant an exception and allow the issuance of permits. Required landscaping shall be reviewed and approved by the Director, and in no case shall landscaping be less than that required by this Chapter. Landscaping shall consist of ground cover, shrubbery, and trees.

2. Installation - All required landscaping and related improvements, such as irrigation, etc., shall be completed prior to the issuance of a Certificate of Occupancy. Additionally, all required landscaping and related improvements within the public right-of-way, and/or required by Conditions of Approval in conjunction with recording of the Final Plat, shall be completed or financially guaranteed prior to the recording of a Final Plat. If an applicant chooses to financially secure landscaping and related improvements in order to record a Final Plat, such financial security shall be consistent with the provisions of this Code, shall be reviewed and approved by the Director, and shall be for an amount at least equivalent to 120 percent of the cost of the installation of the landscaping and related improvements.

3. Coverage within Three Years - All required landscaping shall provide a minimum 90 percent ground coverage within three years. A financial guarantee shall be provided for new residential development, with the exception of areas within single-family or Duplex lots. A financial guarantee shall also be provided for new nonresidential development, and nonresidential redevelopment that involves a 3,000 sq. ft. or 20 percent expansion, whichever is less, except that 20 percent expansions less than 500 sq. ft. are exempt. The financial guarantee shall cover maintenance for a three-year period from the date that the landscaping was installed by the applicant and accepted by the City. This guarantee shall be established prior to the issuance of a Final Certificate of Occupancy and prior to recording of a Final Plat. Additionally, this guarantee shall be consistent with the provisions of this Code, shall be reviewed and approved by the Director, and shall be for an amount that is at least equivalent to 50 percent of the cost of installation of required landscaping and related improvements, plus 20 percent of the 50 percent figure.

   To release this guarantee at the end of the three-year period, the developer shall provide a report to the Director. This report shall be prepared by a licensed arborist or licensed landscape contractor and shall verify that 90 percent ground coverage has been achieved, either by successful plantings or by the installation of replacement plantings. The Director shall approve the report prior to release of the guarantee.

b. Appropriate care and maintenance of landscaping on-site and landscaping in the adjacent right-of-way is the right and responsibility of the property owner, unless City ordinances specify otherwise for general public and safety reasons. A City permit is required to plant, remove, or prune any trees in a public right-of-way. Pruning shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Landscaping, buffering, and screening required by this Code shall be maintained. If street trees or other plant materials do not survive or are removed, materials shall be replaced in kind.

c. Protection of Shrub, Ground Cover and Tree Specimens in Inventoried Areas of the Adopted Natural Features Inventory Map dated December 20, 2004 -

1. For shrub, groundcover, and tree specimens within the areas inventoried as part of the Natural Features Inventory, preservation requirements shall be in accordance with the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. See Adopted Natural Features Inventory Map dated December 20, 2004, for information regarding areas inventoried as part of the Natural Features Inventory.

EXCERPT
CHAPTER 4.4
LAND DIVISION STANDARDS

Section 4.4.10 - PURPOSES

The Land Division standards in this Chapter are intended to preserve, protect, and promote the public health, safety, convenience, and general welfare. These standards are implemented in conjunction with the Subdivision, Expedited Land Division, and Partition procedures in Chapter 2.4 - Subdivisions and Major Replats; Chapter 2.5 - Planned Development; and Chapter 2.14 - Partitions, Minor Replats, and Property Line Adjustments, respectively. They are also implemented in conjunction with Chapter 4.0 - Improvements Required with Development.

Section 4.4.20 - GENERAL PROVISIONS

4.4.20.01 - Applicability

All Land Divisions shall be in compliance with the requirements of the applicable zone and this Chapter, as well as with all other applicable provisions of this Code. Modifications to these requirements may be made through the procedures in Chapter 2.5 - Planned Development.

4.4.20.02 - Blocks

a. **General** - Length, width, and shape of blocks shall be based on the provision of adequate lot size, street width, and circulation; and on the limitations of topography.

b. **Size** - Blocks shall be sized in accordance with the Block Perimeter provisions within Section 4.0.60.n of Chapter 4.0 - Improvements Required with Development.

4.4.20.03 - Lot Requirements

a. **Size and Shape** - Lot size, width, shape, and orientation shall be appropriate for the location of the Subdivision and for the Use Type contemplated. No lot shall be dimensioned to contain part of an existing or proposed street. All lots shall be buildable, and depth shall generally not exceed 2.5 times the average width. Lot sizes shall not be less than required by this Code for the applicable zone. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for off-street parking and service facilities required by the type of use proposed,

lands.

h. **Minimum Assured Development Area** - For property with Natural Resources or Natural Hazards subject to Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, lots created through a Subdivision, Partition, or Property Line Adjustment process shall be consistent with the provisions of Chapter 4.11 - Minimum Assured Development Area (MADA) are met.

Section 4.4.30 - SPECIAL PROVISIONS FOR LOTS CREATED THROUGH LAND PARTITIONS OR MINOR REPLATS VIA SECTION 4.4.20.03.b "1" or "2."

In addition to complying with the provisions of Section 4.4.20 above, Partitions and Minor Replats that qualify for the exception in Section 4.4.20.03.b "1" or "2," above, shall be subject to the following standards and procedures.

4.4.30.01 - Access Way

a. For residential lots, access requirements of Section 4.4.20.03.b may be reduced and combined to provide an Access Way, a narrow strip of land connecting a parcel to a dedicated right-of-way or private street within a separate tract, in accordance with the following:

1. An Access Way to a single lot and one dwelling unit shall be a minimum of 17 ft. wide;

2. An Access Way to a single lot and two dwelling units or combined Access Ways to two lots and two dwelling units shall be a minimum of 23 ft. wide;

3. An Access Way to a single lot with more than two dwelling units shall be a minimum of 28 ft. wide;

4. A combined Access Way to two or three lots and three or four dwelling units with a common drive shall be a minimum of 28 ft. wide; and

5. A combined Access Way to two or three lots and five or more dwelling units with a common drive shall be a minimum of 34 ft. wide.

4.4.30.02 - Lot Width - The minimum lot width shall be as required by the applicable zone.

4.4.30.03 - Lot Area - The lot area shall be as required by the applicable zone and shall be provided entirely within the building site area, exclusive of any Access Way. See Figure 4.4-1 Lot Area Exclusive of Access Way, below.

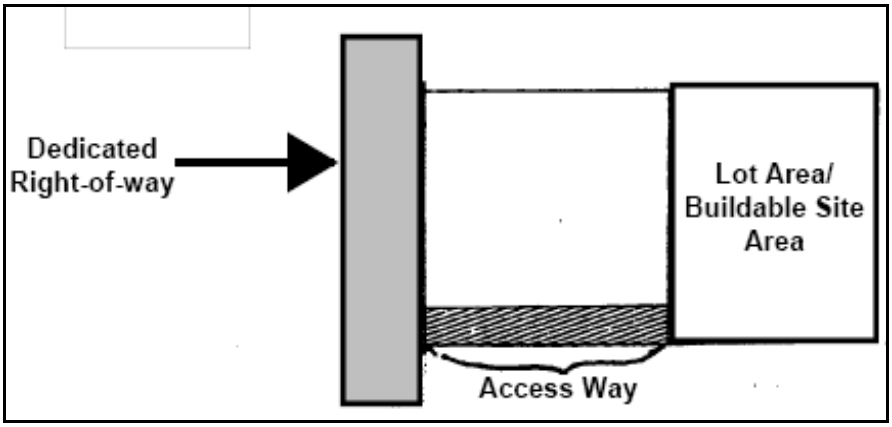


Figure 4.4-1 - Lot Area Exclusive of Access Way

4.4.30.04 - Front Yard Determination - If the partitioned lot is a flag lot, the property owner may determine the location of the front yard, provided that no side yard is less than 10 ft. long.

4.4.30.05 - Site Improvements - These requirements shall be in addition to others in Chapter 4.0 - Improvements Required with Development.

a. **Screening** - A screen shall be provided along the property line of a lot of record where a paved driveway is within five ft. of the lot line; if the driveway is shared, the lot is exempt from this provision. Screening also may be required to maintain privacy for abutting lots. These screening requirements may be waived if the adjacent affected property owner consents in writing to such a waiver. Required screening shall be provided in accordance with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

b. **Fire Protection** - The Fire Chief may require installation of a fire hydrant and turnaround(s) if the length of an Access Way would have a detrimental effect on fire fighting capabilities.

4.4.30.06 - Existing Vegetation

Significant beneficial vegetation including trees and shrubbery shall be preserved wherever possible, consistent with Chapter 2.11 - Floodplain Development Permit,

Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

4.4.30.07 - Reciprocal Easements

If a common driveway serves more than one lot, a reciprocal easement to ensure access rights shall be recorded with the approved partition map.

CHAPTER 4.5 HAS BEEN RENAMED. IT USED TO BE "CHAPTER 4.5 - NATURAL HAZARDS AND HILLSIDE DEVELOPMENT PROVISIONS." THE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS WERE MOVED TO A NEW CHAPTER CALLED "CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS." THE EXISTING CHAPTER 4.5 IS NOW CALLED "CHAPTER 4.5 - FLOODPLAIN PROVISIONS." THE DOUBLE UNDERLINE AND ~~STRIKE-OUT~~ FONTS USED BELOW INDICATE THE CHANGES NEEDED TO ADDRESS THIS CODE CHAPTER SPLIT AND ALSO ADDRESS THE FEMA UPDATE PROJECT.

CHAPTER 4.5
~~NATURAL HAZARD AND HILLSIDE DEVELOPMENT~~ FLOODPLAIN PROVISIONS

Section 4.5.10 - PURPOSES - ~~NATURAL HAZARD~~ FLOODPLAIN PROVISIONS

Without establishing any priority, the purposes of this Chapter are intended to:

a. Protect human life, health, and property~~Reduce flood damage and loss of life~~ in areas subject to periodic flooding; *[Model Ordinance Section I-C(1)]*

~~**b.** Reduce damage and loss of life from other Natural Hazards, including steep slopes, landslide risk areas, and landslide-related risk areas;~~

b~~c~~. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to Areas Subject to Natural Disasters and Hazards;

c~~d~~. Implement some of the land use aspects of the City's Stormwater Master Plan, as well as some aspects of the City's Endangered Species Act Salmon Response Plan;

d~~e~~. Through Floodplain regulation, contribute to the Properly Functioning Condition of Streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;

e~~f~~. Manage stormwater drainage in a manner that:

1. Maintains the Properly Functioning Conditions of Streams;

2. Provides for the conveyance and temporary storage of floodwater;

3. Reduces floodwater velocity;

4. Facilitates sediment deposition in the Floodplain;

5. Provides an opportunity for groundwater recharge; and

6. Promotes other Stormwater and Floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other Natural Hazard areas;

f~~g~~. Implement requirements for the City's participation in the National Flood Insurance Program, including the Community Rating System;~~.~~

g. Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in Floodplains; *[Model Ordinance Section I-C(2)]*

h. Help maintain a stable tax base by providing for the sound use and Development of flood-prone areas; *[Model Ordinance Section I-C(3)]*

i. Minimize expenditure of public money for costly flood control projects; *[Model Ordinance Section I-C(4)]*

j. Minimize the need for rescue and emergency services associated with flooding and generally undertaken at the expense of the general public; *[Model Ordinance Section I-C(5)]*

k. Minimize unnecessary disruption of commerce, access and public service during times of flood; *[Model Ordinance Section I-C(6)]*

l. Facilitate the notification of potential buyers that property is in an Special Flood Hazard Area; *[Model Ordinance Section I-C(7)]*

m. Compel those who occupy the Special Flood Hazard Areas to assume responsibility for their actions; *[Model Ordinance Section I-C(8)]*

n. Manage the alteration of Special Flood Hazard Areas, stream channels and shorelines to minimize the impact of Development on the natural and beneficial functions of the Floodplain; and *[Model Ordinance Section I-C(9)]*

o. **Methods of Reducing Flood Losses -** In order to accomplish its purpose, this chapter and Chapter 2.11 - Floodplain Development Permit include methods and provisions to: *[Model Ordinance Section I-D]*

1. Require that Development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction; *[Model Ordinance Section I-D(1)]*

2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion; *[Model Ordinance Section I-D(2)]*

3. Control filling, grading, dredging and other Development which may increase flood damage or erosion; *[Model Ordinance Section I-D(3)]*

4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands; *[Model Ordinance Section I-D(4)]*

5. Preserve and restore natural Floodplains, stream channels, and natural protective barriers which carry and store flood waters, and; *[Model Ordinance Section I-D(5)]*

6. Coordinate with and supplement provisions of Oregon Building Codes.*[Model Ordinance Section I-D(6)]*

p. To advance~~In order to assist in the furtherance of~~ these purposes, where not required, creation of open space tracts is encouraged within areas designated as Natural Resources or Natural Hazards on the Comprehensive Plan and Official Zoning Maps.

Section 4.5.20 - APPLICABILITY

4.5.20.01 - ~~Which~~ Natural Hazards that are Subject to this Chapter -

a. These provisions apply to~~: 1. P~~public and private properties in the 100-year Floodplain of rivers and local Streams;

~~2. Areas with slopes equal to or greater than 10 percent;~~

~~3. High landslide risk areas;~~

~~4. Existing landslide areas; and~~

~~5. Landslide debris run-out areas.~~

b. **Mapping of Natural Hazards** - ~~1.Natural Hazards Map -~~ The Natural Hazard areas in "a," above, are mapped on the Corvallis Natural Hazards Map.

The Special Flood Hazard Areas identified by the Federal Emergency Management Agency in its Flood Insurance Study for Benton County and Incorporated Areas, dated June 2, 2011, with accompanying Flood Insurance Rate Maps or Digital Flood Insurance Rate Maps, and other supporting data, are adopted by reference and declared a part of the 100-year Floodplain regulations presented below. The Flood Insurance Study and the Flood Insurance Rate Map are on file at the office of the City of Corvallis Engineer at 1245 NE Third Street, Corvallis, Oregon 97330, and at the Development Services Division at 501 SW Madison Avenue, Corvallis, Oregon, 97333. Not every Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 4.5.50.02, 4.5.50.03.p, and 4.5.60.02.b to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing Development proposals that affect the 100-year Floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the 100-year Floodplain regulations contained in this Chapter and Chapter 2.11 - Floodplain Development Permit.~~The Flood Insurance Study for the City of Corvallis, dated July 2, 1984, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRM) and Flood Boundary & Floodway Maps of Corvallis, Oregon, dated January 3, 1985, and any revisions thereto, are the basis for establishing areas of special flood hazard (100-year Floodplain) and are hereby adopted by reference and declared to be part of this Ordinance.~~ *[44 CFR 60.3(b)(1), (c)(1), and (d)(2) & Model Ordinance Section III-B]*

~~2. Exclusion of Corvallis Fault Line and Liquifaction Soils - Hazards associated with the Corvallis Fault Line and liquefaction soils are not addressed as part of this Code. Hazards associated with the Corvallis Fault Line, and with fault lines in general, are difficult to anticipate. This is in part because the Fault has not been precisely mapped and in part because other faults may exist in the area which are not yet known. The hazards posed by liquefaction soils can be addressed by the application of more stringent building construction requirements. However, the City will have a map(s) available for informational purposes to show the approximate location of the Corvallis Fault Line and the location of liquefaction soils. These hazards may need to be addressed per the requirements of the adopted Building Code and/or per the recommendations of geologic studies, etc.~~

4.5.20.02 - Coordination with Building Codes and Greater Restrictions

a. **Coordination with Building Codes** - Pursuant to the requirement established in ORS 455 that the City of Corvallis administers and enforces the State Building Codes, the City Council of the City of Corvallis does hereby acknowledge that the State Building Codes contain certain provisions that apply to the design and construction of buildings and structures located in Special Flood Hazard Areas. Therefore, this chapter and Chapter 2.11 - Floodplain Development Permit are intended to be administered and enforced in conjunction with the State Building Codes. *[ORS 455 & Model Ordinance Sections I-C(4) & V-E]*

b. **Greater Restrictions** - This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and any other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. *[Needed change for chapter structure, given other changes]*

4.5.20.03 - Exceptions to Achieve Minimum Assured Development Area (MADA)

a. **General -** Chapter 4.11 - Minimum Assured Development Area (MADA) explains how Minimum Assured Development Area (MADA) is determined. If the application of Natural Hazard regulations outside prohibited areas, or if the cumulative impact of such Natural Hazard regulations and the application of the regulations in Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions would limit the developable portion of a property below the property's MADA, then Development will be allowed on the property, to the degree necessary to achieve the MADA, as explained in Chapter 4.11 - Minimum Assured Development Area. However, use of MADA provisions to develop~~ment~~ in the 0.2-ft. Floodway is prohibited, ~~in certain areas, regardless of MADA,~~ as outlined in Sections 4.5.90.05 and 4.5.100.03, as well as Section 4.11.50.05 of Chapter 4.11 - Minimum Assured Development Area~~.~~; and

b. **Floodway Fringe Development Pursuant to MADA Provisions Requires Adherence to Partial Protection Floodplain Provisions -** In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.100 - Standards in Partial Protection Floodway Fringe. See Sections 4.5.90.05 and 4.5.100.03.

Section 4.5.30 - DISCLAIMER OF LIABILITY

The degree of flood ~~and other Natural Hazard~~ protection required by this Chapter and Chapter 2.11 - Floodplain Development Permit is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods and hazard events can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. Areas impacted by other Natural Hazards may differ from those shown on the Corvallis Natural Hazards Map. Neither ~~T~~this Chapter nor Chapter 2.11 - Floodplain Development Permit~~does not~~ implies~~y~~ that land outside the ~~areas of~~ ~~S~~special ~~F~~flood ~~H~~hazard~~s~~ Areas or Uses permitted within such areas will be free from flooding or flood damages, nor does it imply that land outside of mapped hazard areas will be free from damage or earth movement in a hazard event. Neither ~~T~~this Chapter nor Chapter 2.11 - Floodplain Development Permit shall ~~not~~ create liability on the part of the City of Corvallis, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages or other hazard damages that result from reliance on this chapter and Chapter 2.11 - Floodplain Development Permit, ~~Ordinance~~ or any administrative decision lawfully made hereunder. Compliance with the minimum standards established by this Chapter is not intended to relieve any private party from liability for the design or construction of Development which causes damage or injury by increasing flooding or aggravating an existing and known hazard. *[Existing text, but satisfies FEMA Region X & Model Ordinance Section III-F]*

~~**Section 4.5.50 - STANDARDS FOR AREAS OF SPECIAL FLOOD HAZARD - 100 YEAR FLOOD PLAIN**~~

Section 4.5.5~~40.01~~ - FINDINGS OF FACT, DEFINITIONS, AND RELATED STANDARDS ~~**Definitions and Related Standards**~~

4.5.40.01 - Findings of Fact -

a. The Special Flood Hazard Areas of the City of Corvallis are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.*[44 CFR 59.22 & Model Ordinance Section I-B(1)]*

b. These flood losses are caused by buildings and structures in Special Flood Hazard Areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in Floodplains causing increases in flood heights and velocities.*[44 CFR 59.22 & Model Ordinance Section I-B(2)]*

c. The City of Corvallis has the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper Floodplain management.*[44 CFR 59.22 & Model Ordinance Section I-B(3)]*

4.5.40.02 - Definitions

a.~~4.5.50.01c~~ Specific Definitions for Phrases Related to 100-Year Floodplain Regulations - See Section 1.6.40 for the full set of definitions that are unique to the 100-year Floodplain regulations presented below. *[Needed change for chapter structure, given other changes]*

b.~~4.5.50.01a~~ 100-year Floodplain, 0.2-ft. Floodway, and Floodway Fringe -

1. 100-year Floodplain - The 100-year Floodplain is a land area adjacent to a river, stream or other water body that is subject to a one percent or greater chance of flooding in any given year. The Floodplain is divided into two sections: the Floodway and Floodway Fringe areas. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) or, for areas not mapped by FEMA, it is mapped via Floodplain studies approved by the Floodplain Administrator or designee. It is also referred to as the Special Flood Hazard Area and is the area subject to Base Flood regulations. See Figure 4.5-1 - Components of 100-year Floodplain; and the following definitions in Section 1.6.40: Floodway (Regulatory Floodway);~~,~~ Floodplain - 100-year;~~,~~ Flood,100-year;~~,~~ Base Flood;~~,~~ and Floodway Fringe.~~, and Figure 1.6-16 - Floodplain Cross Section in Chapter 1.6 - Definitions. See also the Area of Special Flood Hazard definition in Chapter 1.6 - Definitions.~~ *[Model Ordinance Section II definition for Special Flood Hazard Area & needed changes for chapter structure, given other changes]*

2. 0.2-ft. Floodway - The 0.2-ft. Floodway is defined as the river channel or other watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the W~~w~~ater S~~s~~urface E~~e~~levation more than 0.2 ft. See Figure 4.5 -1 - Components of 100-year Floodplain~~,~~; and the Floodway (Regulatory Floodway) definition in Section 1.6.40. ~~Floodway, 0.2-ft. in Chapter 1.6 - Definitions~~. The Regulatory Floodway for the City of Corvallis is the 0.2-ft. Floodway. However, unless development qualifies as one of the exceptions per Sections 2.11.40, 4.5.50.04, or 4.5.80.05, no rise in BFE is allowed. *[Needed changes for chapter structure, given other changes]*

3. Floodway Fringe - The Floodway Fringe is defined as the area of the 100-year Floodplain lying outside of the 0.2-ft. Floodway. See Figure

4.5 -1 - Components of 100-year Floodplain; and the following definitions in Section 1.6.40: Floodway Fringe and Floodway (Regulatory Floodway). However, unless development qualifies as one of the exceptions per Sections 2.11.40, 4.5.50.04, or 4.5.80.05, no rise in BFE is allowed. ~~, 0.2-ft. in Chapter 1.6 - Definitions~~.*[Needed changes for chapter structure, given other changes]*

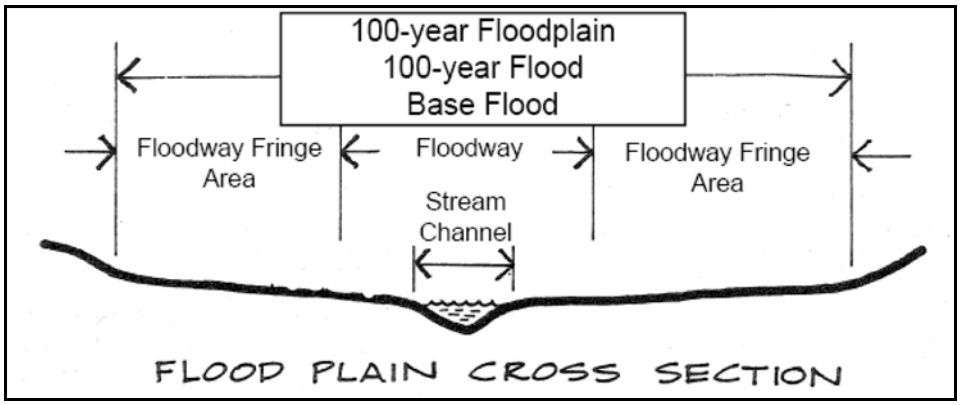
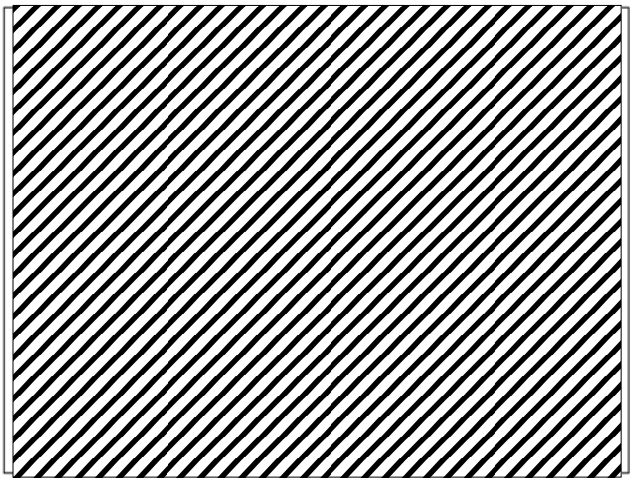


Figure 4.5-1 - Components of the 100-year Floodplain
Where development is allowed per Code provisions, no rise in Base Flood Elevation (BFE) is allowed, unless the development qualifies as one of the specific exceptions outlined in Sections 2.11.40, 4.5.50.04, or 4.5.80.05.

NOTE: Delete Graphic below & use graphic above instead, to better match existing Chapter 1.6 - Definitions graphics and to remove the inconsistency between the old graphic below and the current Code standards that do not allow a rise in the Base Flood Elevation. During the Phase III Code Update Project, the old graphic below was retained in the current Code to demonstrate how the actual 0.2-ft. Floodway boundary was calculated. It was not meant to imply that a rise in BFE was allowed in the Floodway Fringe.



~~Figure 4.5-1 - Components of 100-year Floodplain~~

4.5.40.03 - ~~b~~. Relationship of 0.2-ft. Floodway and Floodway Fringe to Regulated Riparian Corridors - Areas of the 0.2-ft. Floodway and Floodway Fringe that fall within a Regulated Riparian Corridor are also subject to the provisions of Chapter 4.13 - Riparian Corridor and Wetland Provisions. Where regulations are in conflict, the most restrictive shall apply. See Riparian Corridor, Regulated in Chapter 1.6 - Definitions.

Section 4.5.~~4~~50 - PROCEDURES

Compliance with the provisions of this Chapter shall be determined through the development review processes identified in Section 1.2.110 of Chapter 1.2 - Legal Framework and in Chapter 2.11 - Floodplain Development Permit. Applications for Excavation and Grading Permits, Floodplain Development Permits, Building Permits or other permits for buildings and structures on sites containing the 100-year Floodplain ~~or other Natural Hazard areas, as defined in Section 4.5.20,~~ shall be submitted and reviewed to ensure compliance with specifications referenced herein; and to ensure that Development is reasonably safe from anticipated hazards. Such applications ~~for Excavation and Grading Permits, Building Permits or other permits for structures~~ also include those ~~for~~ needed for Manufactured Dwellings. Other Development activities as described in this provision include all the activities listed in the Section 1.6.40 definition for Development. However, unless development qualifies as one of the exceptions per Sections 2.11.40, 4.5.50.04, or 4.5.80.05, no rise in BFE is allowed. ~~, but are not limited to, mining, dredging, filling, grading, paving, and excavating.~~

4.5.50.01 - Floodplain Development Permit - A Floodplain Development Permit shall be obtained consistent with Chapter 2.11 - Floodplain Development Permit, prior to initiating Development activities in any Special Flood Hazard Area established through Section 4.5.20.01.b. Floodplain Development Permit applications shall include the items listed in Sections 4.5.50.02, 4.5.50.03, 4.5.50.04, as applicable, and the items listed in Section 2.11.50.01. *[44 CFR 60.3(a) & Model Ordinance Section III-D]*

4.5.50.02~~4.5.40.a.~~ - Development Application - Development applications for all properties containing or abutting a mapped or unmapped Special Flood~~Natural~~ Hazard A~~a~~rea shall accurately indicate the locations of these features and the location of any proposed ~~d~~Development. These d~~D~~evelopment applications ~~shall~~ include Floodplain Development Permits, Excavation and Grading Permits, Building Permits, Public Improvements by Private Contract Permits (PIPC), and any land use application identified in Chapter 2.1 - Comprehensive Plan Amendment through Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments. The Building Official, City Engineer, Floodplain Administrator or designee, or Community Development Director may determine that the following information is not necessary in conjunction with permits for work that would not exacerbate hazard conditions in any way. *[Needed change for chapter structure, given other changes]*

4.5.50.03~~4.5.40.b.~~ - Required Information~~, General~~ - Unless deemed unnecessary per Section 4.5.50.02, a~~A~~ll such ~~d~~Development applications shall include the following information:

a~~1~~. A site plan showing the proposed ~~d~~Development on the site, drawn to a standard scale and including an illustrated scale for use in reductions; *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

b~~2~~. Location of all proposed infrastructure necessary to serve the proposed ~~d~~Development. Such infrastructure includes streets, driveways, water, sanitary sewer, and storm drainage; *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

c~~3~~. Land uses within 300 ft. of the subject property;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

d~~4~~. Title block;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

e~~5~~. North arrow and bar scale;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

f~~6~~. Date(s) of field check(s);*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

g~~7~~. A grading plan, if grading is to occur, showing existing and finished contours on the site, at two- ft. contour intervals;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

h~~8~~. Sources of information, such as national, state, or local soil survey maps; and City maps such as Comprehensive Plan and Zoning Maps, the Natural Hazards Map, the Significant Vegetation Map, the Riparian Corridors and Wetlands Map; and date and scale of aerial photos, etc.; and *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

i~~9~~. Any other relevant submittal requirements identified for ~~d~~Development in areas with other specific Natural Hazards, as specified in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. ~~sections 4.5.50, 4.5.60, and 4.5.70~~. *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

~~**4.5.50.02 - Additional Application Requirements within the 100-year Floodplain**~~
~~In addition to the application requirements in Section 4.5.40, the following information is required with development applications involving property in the 100-year Floodplain:~~

j~~a~~. **Building and Structure Elevations** - For all existing and proposed, relocated, or expanded buildings and structures, e~~E~~levation in relation to the Highest Adjacent Grade, the North American ~~National Geodetic~~ Vertical Datum ~~1929 (NGVD29), of either the~~ 1988 (NAVD88), and the Base Flood Elevation, or the flood Depth Number in AO Federal Flood Zones, as applicable, of the: *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C, IV-C(1)(b & c) & V-A(3 & 4)]*

1. Lowest enclosed area ~~finished floor level~~ of all existing and proposed, relocated, or expanded ~~new~~ buildings and structures. This includes Crawlspaces, basement~~s~~ floors and attached garages, electrical equipment (except utility meters), heating and ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); ~~or~~ *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(c)(i) & V-A(3 & 4)]*

2. Top of proposed garage slabs; and *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(c)(ii) & V-A(3 & 4)]*

3. Next highest floor situated above the items in "1," and "2," above.*[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(c)(iii) & V-A(3 & 4)]*

k.~~2.~~ Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in Section ~~4.5.50.08.c.4~~4.5.110.08, below;*[44 CFR 60.3(a)(1 & 4), (b)(1 & 5), & (c)(4) & Model Ordinance Sections IV-C(1)(e & f) & V-A(3 & 4)]*

l. The locations and sizes of all flood openings in any proposed buildings and structures;*[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(d) & V-A(3&4)]*

m~~b~~. A description of the extent to which any Floodplain or Watercourse is proposed to be altered or affected as a result of proposed ~~d~~Development;*[44 CFR 60.3(a)(1 & 4) & (b)(1 & 6) & Model Ordinance Sections IV-C(1)(g) & V-A(3&4)]*

n~~c~~. **Topographic Survey** - A topographic survey of the ~~d~~Development site, showing existing and proposed topography in two-ft. contour intervals. The survey shall indicate the location of Top-of-bank, consistent with the definition in Chapter 1.6 - Definitions. The survey shall show the 0.2-ft. Floodway boundary and the 100-year Floodway Fringe boundary. The survey shall also show the location of existing and proposed improvements on the site,

including buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale and shall note the distance from Top-of-bank to the improvements on the site; *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-B(5-7), IV-C(1)(a & b) & V-A(3 & 4)]*

od. **Base Flood Elevation** - The applicable Base Flood Eelevation or, in AO Federal Flood Zones, the flood Depth Number;*[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-B(5-7), IV-C(1)(b & c) & V-A(3&4)]*

p. **Determination of Unmapped 100-year Floodplain Information** - The following shall be included with applications involving properties for which any of the items listed below have not been mapped consistent with Section 4.5.20.01.b, and contain or are suspected to contain a portion of the 100-year Floodplain. The applicant shall provide a scope of work for a Floodplain study to the Floodplain Administrator or designee. The Floodplain Administrator or designee shall review the scope of work to determine whether or not it is compliant with established procedures. The scope of work may or may not be required to include off-site areas. The final scope of work and Floodplain study shall be prepared by a licensed engineer and reviewed and approved by the Floodplain Administrator or designee. *[44 CFR 60.3(a)(1 & 4) & (b)(1 & 4) & Model Ordinance Sections IV-B(5-7), IV-C(1)(all), IV-C(1)(b), V-A(3 & 4), V-C(1), & V-D(1)]*

1. The boundary of the 100-year Floodplain. Newly mapped 100-yr. Floodplain areas shall be designated High Protection Floodplain;

2. The boundary of the 0.2-ft. Floodway;

3. A determination of the corresponding Federal Flood Zone (e.g., “A1-30,” “AE,” “AH,” approximate “A,” and “AO”), as applicable; and

4. The Base Flood Elevation for Federal Flood Zones “A1-30," “AE,” “AH,” and approximate “A,” or flood Depth Number for Federal Flood Zone “AO,” as applicable;

qe. All necessary federally-mandated or state-mandated permits issued by from those other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit./from which approval is required by federal or state law, Such permits includeincluding but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended., shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit.*[44*

CFR 60.3(a)(1, 2, & 4) & (b)(1) & Model Ordinance Sections IV-B(4) & V-A(3&4)]

4.5.50.04 - Provisions for New Technical Data When Conditional Letter of Map Revision (CLOMR) and Associated Letter of Map Revision (LOMR) Required

Notwithstanding prohibitions contained in Sections 4.5.80.01, 4.5.90.02, and 4.5.100, exceptional circumstances directly related to the construction of public infrastructure may necessitate an increase in the Base Flood Elevation within the 0.2-ft. Floodway and/or Floodway Fringe. The Floodplain Administrator or designee shall be responsible for determining whether exceptional circumstances exist. If such exceptional circumstances are found to exist, the applicant shall provide materials required by Section 4.5.50.02, 4.5.50.03, and 2.11.50.01 as part of a Floodplain Development Permit application and shall also be responsible for: *[44 CFR 60.3(c)(13) & (d)(4) & 65.3 & Model Ordinance Sections V-B(3 & 5), V-C(2), & V-Q]*

a. Having technical data prepared in a format required for a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) and submitting such data to FEMA on the appropriate application forms. Submittal and processing fees for these map revisions shall be the responsibility of the applicant;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

b. Covering all costs associated with obtaining a CLOMR or LOMR from FEMA. The City of Corvallis shall be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application; *[CFR and Model Ordinance cites above at the end of lead paragraph]*

c. Obtaining FEMA approval for the CLOMR or LOMR and including the written documentation of the approval to the Floodplain Administrator or designee as part of the application materials in Section 4.5.50.02 and 4.5.50.03, as well as part of the application materials for a Floodplain Development Permit required by Chapter 2.11 - Floodplain Development Permit; and *[CFR and Model Ordinance cites above at the end of lead paragraph]*

d. Obtaining from FEMA, within six months of project completion, a LOMR reflecting the as-built changes to the FIRM, and providing a copy of the FEMA-approved materials to the Floodplain Administrator or designee. This provision applies when the applicant obtains an approved CLOMR from FEMA, or when the applicant's Development modifies Floodplain boundaries or Base Flood Elevations.*[CFR and Model Ordinance cites above at the end of lead paragraph]*

Section 4.5.60 - ADMINISTRATION AND INTERPRETATION

4.5.60.01 - Administration -

a. **Designation of a Local Floodplain Administrator** - The City Engineer is hereby appointed as the Floodplain Administrator. The City Engineer or designee is responsible for administering and implementing the provisions of this chapter and Chapter 2.11 - Floodplain Development Permit. *[44 CFR 59.22(b) & Model Ordinance Section IV-A]*

b. **Duties and Responsibilities of the Floodplain Administrator or Designee** - Duties of the Floodplain Administrator or designee shall include, but shall not be limited to: *[44 CFR 59.24 & 60.3(a)(1 - 4), (b)(4 & 5), & (d)(1) & Model Ordinance Section IV-B(1-17)]*

1. Review all Floodplain Development Permit applications to determine whether proposed new Development will be located in Special Flood Hazard Area;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

2. Review applications for modifications of any existing Development in Special Flood Hazard Areas for compliance with the requirements of this Chapter and Chapter 2.11 - Floodplain Development Permit;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

3. Interpret Special Flood Hazard Area boundaries, provide available Special Flood Hazard Area information, and provide Base Flood Elevations, where they exist;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

4. Review proposed Development to assure that applicants have obtained and provided the necessary permits from governmental agencies from which approval is required by federal or state law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334; the Endangered Species Act of 1973, 16 U.S.C. 1531-1544; and State of Oregon Removal-Fill permits. Copies of such permits shall be maintained on file;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

5. Review all Floodplain Development Permit applications to determine if the proposed Development is located in the 0.2-ft. Floodway; and, if so, ensure that the encroachment standards of Section 4.5.80 are met;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

6. When Base Flood Elevation or Floodway data have not been identified by FEMA in a Flood Insurance Study and /or Flood Insurance Rate Maps, the Floodplain Administrator or designee shall require an applicant to provide a Floodplain study prepared by a licensed engineer, and the study shall be in accordance with Section 4.5.50.03.p. Newly mapped 100-yr. Floodplain areas shall be designated as High Protection Floodplain. Upon receipt and approval of this Floodplain study, the Floodplain Administrator or designee shall review, and reasonably utilize scientific or historic Base Flood Elevation and Floodway data available from a federal, state, or other source, in order to administer this chapter and Chapter 2.11 - Floodplain Development Permit;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

7. When Base Flood Elevations or other engineering data are not available from an authoritative source, the Floodplain Administrator or designee shall take into account the Special Flood Hazard Areas, to the extent they are known, to determine whether a proposed building site or Subdivision will be reasonably safe from flooding. Oregon Residential Specialty Code R324.1.3 authorizes the Building Official to require an applicant to determine a Base Flood Elevation where none exists. Additionally, Section 4.5.50.03.p authorizes the Floodplain Administrator or designee to require an applicant to provide a Floodplain study in accordance with the provisions of that Code section. Newly mapped 100-yr. Floodplain areas shall be designated as High Protection Floodplain;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

8. Where interpretation is needed of the exact location of boundaries of the Special Flood Hazard Areas, including regulatory Floodway (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Floodplain Administrator or designee shall make the interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 1.1.30;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

9. Issue Floodplain Development Permits when the provisions of Chapter 2.11 - Floodplain Development Permit have been met, or deny the same in the event of noncompliance;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

10. Coordinate with the Building Official to assure that applications for Building Permits comply with the requirements of this chapter and Chapter 2.11 - Floodplain Development Permit;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

11. Obtain from applicants, verify, and record the actual elevation in relation to the vertical datum used on the effective Flood Insurance Rate Map, or Highest Adjacent Grade where no Base Flood Elevation is available, of the Lowest Floor level, including Basement, of all New Construction or Substantially Improved buildings and structures;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

12. Obtain from applicants, verify, and record the actual elevation, in relation to the vertical datum used on the effective Flood Insurance Rate Map, or Highest Adjacent Grade where no Base Flood Elevation is available, to which any new or Substantially Improved buildings or structures have been flood-proofed. When flood-proofing is utilized for a structure, the Floodplain Administrator or designee shall obtain from applicants certification of design criteria from a registered professional engineer or architect;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

13. Ensure that all records pertaining to the 100-yr. Floodplain regulations presented in this Chapter are permanently maintained in the office of the Floodplain Administrator or designee and shall be open for public inspection;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

14. Make inspections in Special Flood Hazard Areas to determine whether Development has been undertaken without issuance of a Floodplain Development Permit, ensure that Development is undertaken in accordance with a Foodplain Development Permit and the provisions of this Chapter and Chapter 2.11 - Floodplain Development Permit, and verify that existing buildings and structures maintain compliance with the provisions of this Chapter and Chapter 2.11 - Floodplain Development Permit; *[CFR and Model Ordinance cites above at the end of lead paragraph][Also 44 CFR 59.22, 59.24(b), & 59.2(b), & Model Ordinance Section V-T(1)]*

15. The Floodplain Administrator or designee shall make periodic inspections of Floodplain areas to establish that Development activities within the Floodplain are being performed in compliance with an approved Floodplain Development Permit. The Floodplain Administrator or designee shall prepare a field report listing non-complying conditions and shall proceed with enforcement actions including, but not limited to: the issuance of a Stop Work Order; the issuance of a citation; and the commencement of civil legal proceedings;*[CFR and Model Ordinance cites above at the end of lead paragraph][Also 44 CFR 59.22, 59.24(b), & 59.2(b), & Model Ordinance Section V-T(1)]*

16. Coordinate with the Building Official to inspect areas where existing buildings and structures in Special Flood Hazard Areas have been damaged, regardless of the cause of damage, and notify owners that permits may be required prior to repair, rehabilitation, demolition, relocation, or reconstruction of the Building or Structure; and *[CFR and Model Ordinance cites above at the end of lead paragraph]*

17. Make Substantial Improvement or Substantial Damage determinations.*[CFR and Model Ordinance cites above at the end of lead paragraph]*

4.5.560.042 - Interpretation

a. Interpretation and Application of this Chapter and Chapter 2.11 - Floodplain Development Permit - In the interpretation and application of the 100-year Floodplain regulations presented below, all provisions shall be: *[FEMA Region 10 & Model Ordinance Section III-E(1-3)]*

1. Considered as minimum requirements;

2. Liberally construed in favor of the governing body, and;

3. Deemed neither to limit nor repeal any other powers granted under state statutes, including state Building Codes.

b. Interpretation of Flood Insurance Rate Map and Other Floodplain Boundaries - When there appears to be a conflict between a mapped boundary and actual field conditions, the ~~City Engineer~~Floodplain Administrator or designee shall determine the exact location of the boundaries of the Floodplain. Where FEMA Base Flood E~~e~~levation information is unavailable for Special F~~f~~lood H~~h~~azard A~~a~~reas, the ~~City Engineer~~Floodplain Administrator or designee shall obtain, review, and reasonably utilize any Base Flood E~~e~~levation and Floodway data as a basis for applying standards in the Floodway Fringe~~, 1.0-ft. Floodway,~~ and 0.2-ft. Floodway. The Floodplain Administrator or designee is authorized to require applicants to provide such information via Section 4.5.50.03.p.*[Model Ordinance Section IV-B(8)]*

Section 4.5.750~~.05~~ - INCENTIVES FOR RELOCATING BUILDINGS, STRUCTURES, PARKING LOTS, AND OTHER IMPERVIOUS SURFACES OUTSIDE THE 100-YEAR FLOODPLAIN~~Incentives for Relocating Structures, Parking Lots, and other Impervious Surfaces Outside of the 100-Year Floodplain~~

Existing buildings and structures, parking lots, and other impervious surface areas that are removed from the 100-year Floodplain will qualify for the benefits in "a," and "b," below. Additionally, new ~~d~~Development is also eligible for the benefits in "a," and "b," below, in areas of the 100-year Floodplain where such ~~d~~Development is allowed, including identified portions of the Willamette River, Mary's River, Millrace Floodplain, and Partially Protected local Stream areas.

4.5.70.01~~a.~~ - Allowed Intensification -

a~~1~~. Residentially Zoned Properties - Development or redevelopment of a residentially zoned property, or of a group of contiguous residentially zoned properties, may transfer density from portions of the site within the ~~0.2-ft.~~ Floodway Fringe to portions of the site outside of the ~~0.2- ft.~~ Floodway Fringe to the extent allowed by use of the ~~d~~Development standards in the next most intensive ~~d~~Development zone. However, this intensification is only allowed provided that, in resultant ~~d~~Development, no buildings, structures or parking areas are located within the ~~0.2-ft.~~ Floodway Fringe portion of the site.

b~~2~~. Nonresidentially Zoned Properties for which at Least 25 Percent of the Total Site Area is within the 100-year Floodplain -

1.~~a)~~ Allowed building height of the underlying zone may be increased by 10 ft. if all improvements, including buildings and parking areas, are removed from at least 75 percent of the site area within the Floodplain. This is not a cumulative standard and cannot be combined with height exceptions allowed elsewhere in this Code.

2.~~b)~~ Allowed building height of the underlying zone may be increased by 20 ft. if all improvements, including buildings and parking areas, are removed from 100 percent of the site area within the Floodplain. This is not a cumulative standard and cannot be combined with height exceptions allowed elsewhere in this Code.

4.5.70.02~~b.~~ - Reduction of Impervious Surface Area for Development Sites with at Least 50 percent of Their Area within the 100-year Floodplain -

When a ~~d~~Development site has at least 50 percent of its site area within the 100-year Floodplain, the height of buildings and structures may be increased by 10 ft. above the height normally allowed in the applicable underlying ~~d~~Development zone if ~~d~~Development or redevelopment of the site results in pervious surface area for at least 50 percent of the entire ~~d~~Development site. Gravel, paving, concrete, buildings, and structures are all impervious. This is not a cumulative standard and cannot be combined with height exceptions allowed elsewhere in this Code.

Section 4.5.8~~50.06~~ - STANDARDS IN THE 0.2-FT. FLOODWAY~~Standards in the 0.2-ft. Floodway~~ -

4.5.80.01~~a.~~ - Encroachments -

Except as provided in Section 4.5.80.05, n~~N~~o encroachments are allowed within the 0.2-ft. Floodway, with the exception of bridges, infrastructure, utilities, or Water-dependent Uses, for which it may be demonstrated, through hydrologic and hydraulic analyses certified by a registered professional civil engineer and performed in accordance with standard engineering practices, that the proposed encroachment would not result in any increase in flood levels within the community during the Base Flood discharge. Encroachments include fill, N~~n~~ew C~~c~~onstruction, fences, Substantial Improvements, except as provided in Section 4.5.80.03.c, and other ~~d~~Development. Development within the 0.2-ft. Floodway shall comply with all applicable state and federal requirements. Construction of these facilities must be shown to cause minimal harm to the Properly Functioning Condition of the stream. These improvements shall be subject to the City's Engineering Design Standards. *[44 CFR 60.3(d)(3) & Model Ordinance Section V-B(1)]*

4.5.80.02~~b.~~ - Watercourse ~~Alterations~~ Relocations -

Watercourse relocation~~alteration~~ by artificial means is prohibited, ~~with~~ except~~ions only~~ for emergency management purposes, the realignment of Dunawi Creek back to its natural alignment as allowed by the note on the Comprehensive Plan Map, or as mandated by state or federal actions that supercede local authority. For riverine situations, ~~prior to the alteration or relocation of a Watercourse,~~ the applicant who is authorized for such ~~an alteration~~a relocation must notify the Oregon Department of State Lands (DSL) and the Oregon Department of Land Conservation and Development, and submit copies of such notification to the Floodplain Administrator or designee~~City Engineer~~, prior to the relocation of a Watercourse. The applicant is required to submit copies of said notification to those adjacent communities that the Floodplain Administrator or designee~~City Engineer~~ determines should receive such notification. The applicant shall submit to the Floodplain Administrator or designee~~City Engineer~~ certification provided by a registered professional engineer, assuring that the flood carrying capacity of ~~an altered or~~a relocated Watercourse can and will be maintained. *[44 CFR 60.3(b)(6 & 7) & Model Ordinance Section V-R(1-4)]*

4.5.80.03~~c.~~ - Limitations and Exceptions to Activities in the 0.2-ft. Floodway -

In addition to the requirements of the underlying zone, the limitations and exceptions in "a~~1~~," through "c~~3~~," below, and in Sections 4.5.80.04 and 4.5.80.05 shall apply to activities within the 0.2-ft. Floodway. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state,

and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

a~~1~~. **Removal of Vegetation** - Removal of vegetation from the 0.2-ft. Floodway is prohibited, except for the following purposes, as approved by the Floodplain Administrator or designee~~City Engineer~~:

1.~~a)~~ Stream restoration and enhancement programs;

2.~~b)~~ Removal of Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary in conjunction with vegetation removal, non-rip-rap erosion control measures shall be utilized;

3.~~c)~~ For the ~~d~~Development of Water-related or Water-dependent Uses, provided they are designed and constructed to minimize impact on the existing Riparian Vegetation;

4.~~d)~~ Removal of emergent in-channel vegetation and debris likely to cause flooding events that result in structural damage;

5.~~e)~~ Mowing/cutting of vegetation in a 20-ft. perimeter around buildings and structures for fire hazard prevention;

6.~~f)~~ Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides, or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations and is also subject to the restrictions set forth in the Corvallis Municipal Code; ~~and~~

7.~~g)~~ Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List~~.~~; and

8. For maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines. However, any maintenance conducted according to these guidelines may only be done if it is consistent with the other applicable provisions of this Chapter 4.5 - Floodplain Provisions, as well as the applicable provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions,

Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

b~~2~~. Maintenance within the 0.2-ft. Floodway -

1.~~a)~~ The limitations imposed by this Section do not preclude the routine maintenance of existing buildings and structures, nor the routine maintenance, repair, and replacement of infrastructure in the 0.2-ft. Floodway.

2.~~b)~~ Maintenance of lawns, non-native riparian planted vegetation, and landscaping shall be kept to a minimum. Additionally, the application of herbicides or other pesticides, and the application of synthetic fertilizers is subject to applicable state and federal regulations and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code;

3.~~c)~~ Where replanting is done, native species shall be used, with the exception of continuing agricultural uses, as specified in Section 4.5.80.03.a.6~~4.5.50.07.a.6~~;

4.~~d)~~ Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions;

5.~~e)~~ Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species. However, no trees shall be planted within utility easements; ~~and~~

6.~~f)~~ Disposal of yard waste or other organic materials is prohibited within the Top-of-bank boundary of any Stream, and is regulated by restrictions in the Corvallis Municipal Code~~.~~; and

7. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines. However, any maintenance conducted according to these guidelines may only be done if it is consistent with the other applicable provisions of this Chapter 4.5 - Floodplain Provisions, as well as the applicable provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

c~~3~~. Existing Buildings and Structures Constructed Prior to December 4, 1984 - Existing buildings and structures that were constructed prior to December 4, 1984, and are located in the area between the 1.0-ft. Floodway and the 0.2-ft. Floodway shall not be considered Nonconforming Structures for the purposes of this Chapter. Additionally, Substantial Improvement or replacement within the same footprint is permitted. Such replacements shall comply with the mandatory construction standards in Sections 4.5.100.02, 4.5.100.03, ~~4.5.50.08.b~~ and 4.5.110~~4.5.50.08.c~~.

4.5.80.04 - Placement of Fill within the 0.2-ft. Floodway -

Any fill allowed to be placed within the 0.2-ft. Floodway, per Sections 2.11.40, 4.5.80.01, or 4.5.80.05, shall be designed to be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour. This standard shall not be varied. *[Model Ordinance Section V-B(2)]*

4.5.80.05 - Exception to the 0.2-ft. Floodway "No Rise" Standard -

Notwithstanding Section 4.5.80.01, an increase in the Base Flood Elevation within the 0.2-ft. Floodway may be permitted in exceptional circumstances, if the Floodplain Administrator or designee approves the exceptional circumstances and if the applicant obtains approval of a Conditional Letter of Map Revision (CLOMR) by the Federal Emergency Management Agency. An applicant must strictly adhere to the procedures for obtaining a CLOMR, as described in Section 4.5.50.04, and provide copies of a valid CLOMR to the Floodplain Administrator or designee prior to receiving approval of a local land use request that will result in any increase in Base Flood Elevation within the 0.2-ft. Floodway. *[44 CFR 60.3(c)(13) & (d)(4) & 65.3 & Model Ordinance Sections V-B(3 & 5), V-C(2), & V-Q]*

Section 4.5.9~~50.07~~ - STANDARDS IN HIGH PROTECTION FLOODWAY FRINGE AREAS~~Standards in High Protection Floodway Fringe Areas~~

The following standards shall apply to activities and ~~d~~Development in High Protection Floodway Fringe areas, as identified on the Natural Hazards Map. Generally, these areas contain the 100-year Floodplain of local Streams, but not the portions of the Millrace and Willamette and Mary's River 100-year Floodplains within the City Limits boundary, as of December 31, 2004. Additionally, Special Flood Hazard Areas mapped after December 31, 2004, shall all be designated High Protection Floodway Fringe and, once annexed, shall be subject to the standards of this chapter and Chapter 2.11 - Floodplain Development Permit.*[This change echos the findings in both the Natural Features Project's ESEE Analysis and City Council formal findings in the adopting ordinances. The addition of this statement makes this existing fact clear in the Code.]*

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within the High Protection Floodway Fringe. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

4.5.90.01 - ~~a.~~Removal of Vegetation -

Removal of vegetation from High Protection Floodway Fringe areas is prohibited, except for the following purposes, as approved by the Floodplain Administrator or designee~~City Engineer~~:

a~~1~~. Stream restoration and enhancement programs;

b~~2~~. Removal of Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary in conjunction with vegetation removal, non-rip-rap erosion control measures shall be utilized;

c~~3~~. For the ~~d~~Development of Water-related or Water-dependent Uses, provided they are designed and constructed to minimize impact on the existing Riparian Vegetation;

d~~4~~. Removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage;

e~~5~~. Mowing/cutting of vegetation in a 20-ft. perimeter around buildings and structures for fire hazard prevention;

f~~6~~. Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides, or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations,and is also subject to the restrictions set forth in the Corvallis Municipal Code;

g~~7~~. Maintenance and protection of the function of City utilities and transportation facilities located within Floodway Fringe areas; ~~and~~

h~~8~~. Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List~~.~~;

i. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines. However, any maintenance conducted according to these guidelines may only be done if it is consistent with the other applicable provisions of this Chapter 4.5 - Floodplain Provisions, as well as the applicable provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; and

j. Removal of vegetation and maintenance within areas allowed to be developed per the Code's Minimum Assurance Development Area (MADA) provisions.

4.5.90.02 -~~b.~~Building, Paving, and Grading Activities -

Within High Protection Floodway Fringe areas, the placement of buildings and structures or impervious surfaces, as well as grading, excavation, and the placement of fill, is prohibited except as provided in Section 2.11.40 and as stated below. Exceptions to the Floodway Fringe restrictions may be made for the purposes identified in items "a~~1~~," through "g~~7~~," of this Section, provided they are designed and constructed to minimize adverse impacts to Stormwater and Floodplain Functions within the Floodway Fringe, comply with the mandatory construction standards in 4.5.100 ~~4.5.50.08.b~~ and 4.5.110~~4.5.50.08.c~~, and, unless permitted in accordance with Section 4.5.50.04, result in no increase in Base Flood Elevation. *[Reiterates current Code requirements]*

a~~1~~. Replacement or Relocation of Existing Buildings and Other Structures - Replacement or relocation of existing buildings and/or other structures, either within the ~~building's~~ original ~~building~~ footprint, or with the same or reduced square footage area elsewhere in the Floodplain portion of the site. A relocation of an existing building and/or other structure within the same square footage area, but located elsewhere within the Floodplain portion of the site, is only allowed if the relocated building and/or other structure enhances Stormwater and Floodplain Function. The relocation shall be considered to enhance Stormwater and Floodplain Function if it furthers any of the following goals without worsening any other goal:

1.~~a)~~ Replaces standard construction with flow-through construction;

2.~~b)~~ Moves the structure or paved area to a higher elevation;

3.~~c)~~ Moves the structure or paved area further from the Top-of-bank of the adjacent Watercourse;

4.~~d)~~ Reduces the amount of impervious surface area in the Floodway Fringe;

5.~~e)~~ Does not negatively impact non-noxious Riparian Vegetation. Invasive and/or Noxious Vegetation is defined in Chapter 1.6 - Definitions; and/or

6.~~f)~~ Maintains or reduces the volume of floodwater displacement.

["b," below was redundant in many ways, so it was combined with "a."]

~~**b2. Replacement or Relocation of Existing Structures Other than Buildings - Replacement or relocation of structures other than buildings either within the original footprint, or with the same or reduced square footage elsewhere within the Floodplain portion of the site. A relocation of an existing structure other than a building, within the same square footage area, but located elsewhere within the Floodplain portion of the site, is only allowed if the relocation enhances Stormwater and Floodplain Function. The relocation shall be considered to enhance Stormwater and Floodplain Function if it furthers any of the following goals without worsening another goal:~~

~~1.a) Moves the paved area to a higher elevation;~~

~~2.b) Moves the paved area farther from the Top-of-bank of the adjacent Watercourse;~~

~~3.c) Reduces the amount of impervious surface area in the Floodway Fringe; and~~

~~4.d) Does not negatively impact non-noxious Riparian Vegetation. Invasive and/or Noxious Vegetation is defined in Chapter 1.6.~~

b~~3~~. Additions to existing buildings and structures that either:

1.~~a)~~ Fall below the threshold of Substantial Improvement as defined in Chapter 1.6 - Definitions; or

2.~~b)~~ Will not result in the filling of additional Floodway Fringe area, such as a second story addition or Flow-through Design construction;

c~~4~~. Location, maintenance, repair, and replacement of infrastructure, and construction of streets, utilities, bridges, bicycle, and pedestrian facilities. Location and construction of such facilities within High Protection Floodway Fringe areas must be deemed necessary to maintain a functional system by the City Engineer. This Code, City Transportation and Utility Master Plans, and other adopted City plans shall guide this determination. The design

standards of Chapter 4.0 - Improvements Required with Development shall be applied to minimize the impact to the Floodway Fringe area;

d~~5~~. Redevelopment of utility operations existing as of December 31, 2004, is also permitted. Required riparian easement areas shall be re-vegetated consistent with Section 4.13.50.d.1 and Section 4.13.50.d.2 of Chapter 4.13 - Riparian Corridor and Wetland Provisions;

e~~6~~. Development of Water-related and Water-dependent Uses, including associated drainage facilities, water and sewer utilities, stormwater detention and retention facilities, flood control projects, and drainage pumps. These improvements shall be subject to the City's Engineering Design Standards;

f~~7~~. Erosion control or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers, or other state or federal regulatory agency with jurisdiction in this area. Erosion control or flood control measures shall either utilize bio-engineering methods other than rip-rap, or shall utilize rip-rap only to address an imminent hazard to a structure built prior to December 31, 2004. If utilized, the rip-rap installation shall be designed by a Professional Engineer Licensed by the State of Oregon and approved by the Oregon Department of Fish and Wildlife; and

g~~8~~. Development associated with a Minimum Assured Development Area that would be allowed in accordance with Chapter 4.11 - Minimum Assured Development Area (MADA).

4.5.90.03 -~~c.~~ Subdivisions, Land Partitions, and Property Line Adjustments -

For properties with Natural Resources or Natural Hazards subject to Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Subdivision, Partition, or Lot Line Adjustment shall create new lots or parcels unless each new and remaining lot or parcel contains:

a~~1~~. An area unconstrained by Natural Resources or Natural Hazards;

b~~2~~. An area that includes Formerly Constrained Areas; or

c~~3~~. Contains an area that includes the areas in "a,"~~c.1.~~ and "b,"~~c.2.~~ above;

and that area is equal to or greater than the Minimum Assured Development Area for the zone or zones in which the ~~d~~Development site falls.

Exceptions to this requirement are lots created for public park purposes and privately- or publicly-owned lots completely contained within land zoned Conservation-Open Space. New Subdivisions and Partitions may contain common open space tracts for the purpose of protecting Natural Resources and/or avoiding Natural Hazards.

4.5.90.04 -~~c.~~ Maintenance within Floodway Fringe Areas -

The limitations imposed by this Section do not preclude the routine maintenance of allowed or pre-existing buildings, structures, infrastructure, and landscaped areas.

a~~1~~. Maintenance of lawns, non-native riparian planted vegetation and landscaping shall not expand lawn areas or remove or damage any non-hazardous tree. A lawn area is defined as vegetated area mowed to an 18-in. or less height;

b~~2~~. The application of herbicides or other pesticides, and the application of synthetic fertilizers are subject to applicable state and federal regulations; and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code;

c~~3~~. Where replanting is done, native species shall be used, with the exception of continuing agricultural uses, as specified in Section 4.5.90.01.f ~~4.5.50.07.a.6~~;

d~~4~~. Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions;

e~~5~~. Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species. However, no trees shall be planted within utility easements; ~~and~~

f~~6~~. Disposal of yard waste or other organic materials is prohibited within 25 ft. of the Top-of-bank boundary of any Stream, and is regulated by restrictions in the Corvallis Municipal Code~~.~~; and

g. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines. However, any maintenance conducted according to these guidelines may only be done if it is consistent with the other applicable provisions of this Chapter 4.5 - Floodplain Provisions, as well as the applicable provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation

Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

4.5.90.05 - Use of Minimum Assured Development Area (MADA) Provisions in the 100-year Floodway Fringe -

a. MADA Provisions Cannot be Used to Encroach into the 0.2-ft. Floodway - While Section 4.5.80 does allow for some very limited types of activities into the 0.2-ft. Floodway, encroachments for the specific purpose of achieving a Minimum Assured Development Area per Chapter 4.11 - Minimum Assured Development Area (MADA) are prohibited in the 0.2-ft. Floodway. This prohibition is consistent with Section 4.11.50.05.

b. Floodway Fringe Development Pursuant to MADA Provisions Requires Adherence to Partial Protection Floodplain Provisions - In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.100 - Standards in Partial Protection Floodway Fringe.

Section 4.5.105~~0.08~~ - STANDARDS IN PARTIAL PROTECTION FLOODWAY FRINGE AREAS~~Standards in Partial Protection Floodway Fringe Areas~~

The following standards shall apply to activities and ~~d~~Development in Partial Protection Floodway Fringe areas, as identified on the Natural Hazards Map. These areas contain the portions of the Millrace and Willamette and Mary's River 100-year Floodplain within the City Limits boundary, as of December 31, 2004; and specific portions of local Streams as noted on the Riparian Corridors and Wetlands Map.

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within the Partial Protection Floodway Fringe. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

Except as provided in Sections 4.5.100.01 and 2.11.40, the placement of fill is prohibited within Partial Protection Floodway Fringe areas. *[This change clarifies the Code to make this existing regulation abundantly clear.]*

4.5.100.01 - ~~a.~~Volumetric Exchange

To compensate for the deposition of fill materials or construction of flood-proofed buildings within any portion of the 100-y~~ea~~r. Floodplain, an equal amount of material

shall be removed from the same property or ~~d~~Development site to ensure that the available flood volume of the 100-y~~ear~~. Floodplain is not reduced. Unless permitted in accordance with Section 4.5.50.04, no increase in Base Flood Elevation shall be permitted. In addition, the following provisions shall apply: *[Reiterates current Code requirements. Also, the change in this opening paragraph take these same existing locational regulations (current Code Section 4.5.50.08.a.6, etc.), modifies them, and moves them up front]*

a. Volumetric exchange shall be limited to the following areas:

1. Floodway Fringe portions of the Mill Race and Willamette and Marys Rivers; and

2. Floodway Fringe portions of other local streams, provided the area is designated as Partial Protection Floodplain on the Natural Hazards Map and at least one of the following is true:

   a) The development is nonresidential construction; or

   b) The development is residential construction and the development is less than a Substantial Improvement; or

   c) The development is residential on a site where the natural grade is such that, if flow-through design were used and the finished floor elevation were constructed at one ft. above Base Flood Elevation, the resulting crawl space would not be deep enough to accommodate the FEMA-required venting which must be installed below Base Flood Elevation; or

   d) The development is a garage; or

   e) The development is a driveway or building access.

b~~1~~. Material removed from the site shall not be taken from Significant Natural Resource areas as mapped on the Corvallis Significant Vegetation Map and Riparian Corridors and Wetlands Map, and shall be removed consistent with all requirements of this Code and other applicable City policies;

c~~2~~. Areas of fill and excavation shall be designed to accommodate floodwater flows and shall not create barriers to the flow of floodwater. Proposals to alter topography in the Floodplain must demonstrate that they will not result in alteration of hydrology or flow regimes that would cause erosion, ~~unwanted~~ ponding, new or increased drainage onto neighboring properties, or other problems;

d~~3~~**.** Volumetric exchange will not be required of buildings within the Floodway Fringe constructed with Flow-through Design, but will be required of flood-proofed buildings and structures within the Floodway Fringe;

e~~4~~**.** Dikes are prohibited in these areas; and

f~~5~~**.** The volume of a stormwater detention facility necessary to accommodate the designed-for storm event shall not count as an element of volumetric exchange~~; and~~.

~~6. Provisions allowing the use of volumetric exchange shall apply only to areas within the Floodway Fringes of the Millrace and the Willamette and Marys Rivers.~~ *[Volumetric exchange is a legitimate form of mitigation to address impacts to Floodplains in Partial Protection Floodplain areas. The Partial Protection Floodplain areas include primarily the Millrace, and the Willamette and Marys River areas. However, there are also Partial Protection Floodplain areas in some already urbanized sections of streams, such as portions of Dixon Creek and urbanized sections of Dunawi Creek, etc. Since properties along these already urbanized sections of streams face challenges because the properties are typically in small lot situations, it is recommended that this volumetric exchange tool be allowed in other Partial Protection areas described in "a," above.]*

4.5.100.02 -~~b.~~ Parking Limitation - to Reduce Impervious Surface Area in the Floodplain -

a~~1~~**.** Where permitted, no expansion, redevelopment, or ~~d~~Development of a parking lot containing four or more parking spaces within any portion of the Floodway Fringe shall contain more than the minimum amount of parking that would be required per Chapter 4.1 - Parking, Loading, and Access Requirements, unless "1~~a~~," or "2~~b~~," below, is true. Parking lots within the Floodway Fringe may be reduced to 80 percent of the minimum parking required by Chapter 4.1. To achieve greater than minimum parking in the Floodway Fringe, parking area shall:

1.~~a)~~ Be constructed of pervious materials, such as grass-crete; or

2.~~b)~~ Be contained in a multi-story structured parking facility with at least 50 percent of the provided parking located above ground level and utilizing Flow-through Design. If this option is used, the parking lot may contain up to 130 percent of the required parking amount.

b~~2~~**.** Compact Spaces - Where parking lots are permitted in the Floodway Fringe:

1.~~a)~~ 40 percent of the parking spaces within new and redeveloped parking lots shall be compact spaces; and

2.~~b)~~ If existing parking lots within the Floodway Fringe are permitted to expand, per the provisions of this Chapter, all additional parking spaces created in the expanded parking lot shall be compact spaces, until the 40 percent threshold in "1~~a~~," above, is reached for the overall parking lot.

4.5.100.03 - Adherence to Sections 4.5.110, 4.5.120, and 4.5.90.05 -

a. Development is required to adhere to the Construction standards in Section 4.5.110 and the Subdivision, Land Partition, and Property Line Adjustment standards in Section 4.5.120.

b. **Use of MADA -** In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.90.05.

Section 4.5.110 -~~c.~~ CONSTRUCTION STANDARDS WITHIN THE 100-YEAR FLOODPLAIN~~Construction Standards within the 100-year Floodplain~~ -

~~1. -~~ **General Standards for All Construction -** Development within the Floodway Fringe (Federal Flood Zones A, AH, A1-A30, AE, AO, and A99 on the Flood Insurance Rate Map), including residential and nonresidential buildings and structures and the public and private facilities serving these buildings and structures, shall adhere to the following standards so as to minimize damage from flooding. Unless permitted in accordance with Section 4.5.50.04, no increase in Base Flood Elevation shall be permitted. Although other types of construction are allowed by this Code, Flow-through Designs are preferable. These standards in 4.5.110.01~~"a,"~~ through 4.5.110.05~~"c~~e~~,"~~ below, shall apply to all construction within the Floodway Fringe. In addition, the standards in ~~"2,"~~ Section 4.5.110.06 through 4.5.110.14, ~~"5,"~~ below apply, as applicable. *[Reiterates current Code requirements]*

4.5.110.01 - ~~)~~ All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, as amended. If obtaining such permits is a Condition of Approval for a land use application, such Condition of Approval shall be satisfied prior to issuance of any construction permit.

4.5.110.02 - ~~)~~ All Land Division and Building Permit applications, including the placement of mobile and Manufactured Dwellings within ~~special~~ Federal F~~f~~lood ~~hazard~~ Z~~z~~ones A, A1-A30, AE, AH, AO, and A99, shall be reviewed for conformance with these standards.

Land Division and mobile or Manufactured Dwelling Facility proposals shall:

a.~~1)~~ Be consistent with the need to minimize flood damage;

b.~~2)~~ Locate and construct utilities such as sewer, gas, electrical, and water systems to minimize or eliminate flood damage;

c.~~3)~~ Provide adequate drainage to reduce exposure to flood hazards;

d.~~4)~~ Design new and replacement water systems within flood prone areas to minimize or eliminate infiltration of flood waters into the systems; and

e.~~5)~~ Design new and replacement sanitary sewer systems within flood prone areas to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters. On-site waste disposal systems are not allowed.

4.5.110.03~~c.~~ - Flood Protection Construction Standards -

a.~~1)~~ All N~~n~~ew C~~c~~onstruction and Substantial Improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from Hydrodynamic and Hydrostatic Loads, including the effects of buoyancy; *[Model Ordinance Section II - Definitions]*

b.~~2)~~ All mobile and Manufactured Dwellings shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors as approved by the Building Official. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces; and *[Model Ordinance Section V-F(1 &2)]*

c.~~3)~~ All building materials not elevated one ft. above Base Flood E~~e~~levation shall be constructed with materials that resist, and methods that minimize, flood damages.

4.5.110.04 - Use of Fill within the Floodway Fringe - Any fill allowed to be placed within the Floodway Fringe shall be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour. This standard shall not be varied.*[Model Ordinance Section V-B(2)]*

4.5.110.05 - Below Grade Crawlspaces - Below-grade Crawlspaces are allowed provided they conform to the following standards as found in FEMA Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*:

a. The building shall be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in "b," below. Because of hydrodynamic loads, Crawlspace construction is not allowed in areas with flood velocities greater than five ft. per second unless the design is reviewed by a qualified design professional, such as a registered architect or licensed professional engineer. Other types of foundations are recommended for these areas;

b. The Crawlspace is an enclosed area below the Base Flood Elevation (BFE) and, as such, shall have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening shall be no more than one ft. above the lowest adjacent exterior grade;

c. Portions of the building below the Base Flood Elevation (BFE) must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the Crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE;

d. Any building utility systems within the Crawlspace shall be elevated above Base Flood Elevation (BFE) or designed so that flood waters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, shall either be placed above the BFE or sealed from flood waters;

e. The interior grade of a Crawlspace below the Base Flood Elevation (BFE) shall not be more than two ft. below the lowest adjacent exterior grade;

f. The height of the below-grade Crawlspace, measured from the interior grade of the Crawlspace to the top of the Crawlspace foundation wall shall not exceed four ft. at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and Building Code requirements for Special Flood Hazard Areas;

g. There shall be an adequate drainage system that removes flood waters from the interior area of the crawlspace. The enclosed area should be drained

within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity or mechanical means; and

h. The velocity of flood waters at the site should not exceed five ft. per second for any Crawlspace. For velocities in excess of five ft. per second, other foundation types should be used.

4.5.110.06~~2.~~ **Standards for Recreational Vehicles -**

a.~~)~~ For the purposes of this Section, Recreational Vehicle is defined as a vehicle which includes all the following characteristics:

1.~~)~~ Built on a single chassis;

2.~~)~~ 400 sq. ft. or less in size when measured at the largest horizontal projection;

3.~~)~~ Designed to be self-propelled or permanently towable by a light duty truck; and

4.~~)~~ Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

b.~~)~~ All Recreational Vehicles placed on sites within Federal Flood Zones A, AH, A1-A30, AE, AO, and A99 shall either:*[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(1-3)]*

1.~~)~~ Be on the site for fewer than 180 consecutive days;*[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(1)]*

2.~~)~~ Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect-type utilities and security devices, and have no permanently attached structures or addition; or *[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(2)]*

3.~~)~~ Meet all standards of Section ~~60.3 (b) (1) of the National Flood Insurance Program Regulations and the elevation and anchoring requirements for Manufactured Dwellings in Paragraph (c)(6) of Section 60.3~~ 4.5.110.03.*[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(3)]*

4.5.110.07 - ~~3.~~Residential Construction -

a.~~)~~ New Construction and Substantial Improvement (as defined in Chapter 1.6 - Definitions) of any residential structure, including mobile and Manufactured Dwellings, shall have the Lowest Floor elevated to a minimum of one ft. above Base Flood Elevation. In AO Federal Flood Zones, the Lowest Floor shall be elevated a minimum of one ft. above the flood Depth Number or, in areas where the Depth Number is unknown, the Lowest Floor shall be elevated a minimum of three ft. above the Highest Adjacent Grade. Lowest Floor includes basements and Habitable attached garages, and electrical (except utility meters), heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork). *See definition for Lowest Floor in Section 1.6.40.[44 CFR 60.3(c)(7 & 8) & Model Ordinance Section V-D(3)(b)]*

b.~~)~~ Accessory buildings and structures less than 200 sq. ft., and fully enclosed nonhabitable areas below the Lowest Floor that are subject to flooding are prohibited, unless designed to automatically equalize Hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters (fences and walls are not governed by this section, but are subject to the standards in Section 4.5.110.12). These accessory buildings and structures and fully enclosed nonhabitable areas include nonhabitable attached or detached garages, provided they meet the description of an "unfinished or flood-resistant enclosure" in the Section 1.6.40 definition for Lowest Floor. Designs for meeting these requirements shall meet standards outlined in the adopted Oregon Structural Specialty Code and shall meet or exceed the following minimum criteria:

1.~~)~~ A minimum of two openings having a total net area of not less than one sq. in. for every sq. ft. of enclosed area subject to flooding shall be provided;

2.~~)~~ The bottom of all openings shall be no higher than one ft. above grade; and

3.~~)~~ Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

4.5.110.08~~4.~~ - Nonresidential Construction -

a.~~)~~ New Construction and Substantial Improvement of any commercial, industrial, or other nonresidential structure shall either have the Lowest Floor elevated a minimum of one ft. above the level of the Base Flood Elevation, or accomplish the alternative approach in "1," through "3," below. Lowest Floor includes basements and Habitable attached garages, and electrical

(except utility meters), heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork). *See definition for Lowest Floor in Section 1.6.40.* The alternative approach includes:

1.) Flood-proofing the Lowest Floor together with attendant utilities and sanitary facilities, so that the structure is watertight a minimum of one ft. above the Base Flood level;

2.) Having the structural components of the Lowest Floor capable of resisting Hydrostatic and Hydrodynamic Loads and effects of buoyancy; and

3.) Having the alternative design certified by a registered professional engineer or architect, stating that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection, based on his/her dDevelopment and/or review of the structural design, specifications, and plans.

b.) Designs for meeting the requirements in "a," above, shall meet standards outlined in the adopted Oregon Structural Specialty Code.

1.) Nonresidential buildings and structures that are elevated and not flood-proofed must have structural components capable of resisting Hydrostatic and Hydrodynamic Loads and effects of buoyancy, for space below the Lowest Floor.

2.) Applicants proposing to flood-proof nonresidential buildings shall be notified that the flood insurance premiums shall be based on rates for buildings and structures with a Lowest Floor that is one ft. below the flood-proofed level.

4.5.110.09 - Critical Facilities -

Construction of new Critical Facilities, as defined in Section 1.6.40, shall be, to the maximum extent possible, located outside the limits of Special Flood Hazard Areas. Construction of new Critical Facilities shall be permissible within the Special Flood Hazard Area if no feasible alternative site is available. Critical Facilities constructed within Special Flood Hazard Areas shall have the Lowest Floor elevated three feet above Base Flood Elevation (or Depth Number in AO Federal Flood Zones). Access to and from the Critical Facility shall also, to the maximum extent possible, be protected to the height utilized above within the corresponding Special Flood Hazard Area(s). Any grade transition necessary to achieve the access protection requirement shall be achieved outside of the corresponding Special Flood Hazard Area(s). Dry floodproofing and sealing measures must be used to ensure that toxic substances or priority organic pollutants, as defined by the Oregon Department of Environmental Quality, will not be displaced by or released into floodwaters. The

Floodplain Administrator or designee shall make the determination as to whether or not the Critical Facility's siting and access have achieved this provision's standards of "to the maximum extent possible."*[Model Ordinance Section V-J]*

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities. The Taylor Water Treatment plant along the Willamette River is an example of such a facility. It is pulling water from the Willamette River. Because of this fact, these types of facilities have purposefully been excluded from the definition of Critical Facility in Section 1.6.40.

4.5.110.10 - Storage Tanks -

a. Underground tanks in Special Flood Hazard Areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood. *[Model Ordinance Section V-K(1)]*

b. Above-ground tanks in Special Flood Hazard Areas shall be:*[Model Ordinance Section V-K(2)]*

1. Attached to and elevated to or above the Base Flood Elevation (or Depth Number in AO Federal Flood Zones) and attached to a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood; or be

2. Anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood.

c. Tank inlets, fill openings, outlets and vents shall be: *[Model Ordinance Section V-K(3)]*

1. A minimum of 2 ft. above Base Flood Elevation (BFE) or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tank during conditions of the design flood; and

2. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

4.5.110.11 - On-site Sewage Systems -

a. Soil absorption systems shall be located outside of Special Flood Hazard Areas. Where suitable soil absorption sites outside of Special Flood Hazard Areas are not available, the soil absorption site is permitted to be located within an Special Flood Hazard Area, provided the Floodplain Administrator or designee finds that it is located to minimize the effects of inundation under conditions of the Base Flood; and *[International Private Sewage Disposal Code, Chapter 3 & Model Ordinance Section V-L(1)]*

b. Mound systems are prohibited in Special Flood Hazard Areas.*[International Private Sewage Disposal Code, Chapter 3 & Model Ordinance Section V-L(2)]*

4.5.110.12 - Fences and Walls -

Unless exempt per Section 2.11.40.b, a Floodplain Development Permit shall be obtained for fences and walls, and the fences and walls shall comply with all of the standards in "a," and "b," below:

a. **Applicability -** These provisions apply when fences and walls are not exempt per Section 2.11.40.b, and at least one of the following is true:

1. The velocity of the flood waters where the fence or wall is proposed is equal to or greater than 5 ft. per second. This velocity information shall be obtained from one of the two following sources:

   a) The Flood Insurance Study for Benton County and Incorporated Areas, dated _____, 2010; or

   b) For sites where no FEMA Flood Insurance Study is available, an independent Floodplain study approved by the Floodplain Administrator or designee and meeting all the requirements as outlined in Section 4.5.50.03.p; or

2. The velocity of flood waters information specified in "1," above, is not available from one of the two sources in Section 4.5.110.12.a.1. In these instances the velocity of flood waters shall be assumed to be greater than 5 ft. per second.

The purpose of the Floodplain Development Permit for fences and walls in Floodplain areas with unknown flood water velocities or velocities at least 5 ft. per second, even where the fences and walls meet the design parameters in Section 4.5.110.12.b, is to ensure proper documentation and consideration of Floodplain activities for the benefit of the Federal Emergency Management Agency (FEMA) and the Floodplain Administrator or designee.

b. Fencing shall fully comply with Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit.

Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit
(Those Fences and Walls Meeting Section 4.5.110.12.a)

	Fencing or Walls Allowed?			
Fence or Wall Type	**Floodway Fringe**	**Floodway**	**Federal Flood Zones AH and AO**	
A	Yes	Yes, provided Section 4.5.80.01 is met.	Yes	
B	Yes	Yes, provided Section 4.5.80.01 is met & there is limited cross channel fencing.	Yes	
C & D	Yes, if fence is completely open below the Base Flood Elevation	Yes, provided Section 4.5.80.01 is met & there is limited cross channel fencing.	AH Federal Flood Zone - Yes, if fence is completely open below the Base Flood Elevation.	AO Federal Flood Zone - Yes, if fence is completely open below the Flood Depth Number where Base Flood Elevation not known.
E & F	Yes, both of the following are met: **1.** An opening or a flap is provided in the areas at or below the Base Flood Elevation at least once every three fence panels or 24 ft., whichever is less. Fences less than 24 ft. in length shall have at least one flap or opening in the areas at or below Base Flood Elevation.The minimum dimensions of the opening or flap shall not be less than 12 in. x 12 or 8 in. x 18 in. In areas of the Floodway Fringe where Base Flood Elevation data is not available, the opening or flap shall be placed within one ft. of the existing grade along the fence alignment; **2.** Openings shall not include any screening of any size or type, except for flaps that are capable of self-release and open to the full dimensions when under pressure of no greater than 20 pounds per sq. ft.	Yes, provided Section 4.5.80.01 is met & there is limited cross channel fencing.	Yes, both of the following are met: **1.** An opening or a flap is provided in the areas at or below the Base Flood Elevation in AH Federal Flood Zone and below Flood Depth Number in AO Federal Flood Zone, at least once every three fence panels or 24 ft., whichever is less. Fences less than 24 ft. in length shall have at least one flap or opening in the areas at or below Base Flood Elevation.The minimum dimensions of the opening or flap shall not be less than 12 in. x 12 or 8 in. x 18 in. In areas of the Floodway Fringe where Base Flood Elevation data is not available, the opening or flap shall be placed within one ft. of the existing grade along the fence alignment; **2.** Openings shall not include any screening of any size or type, except for flaps that are capable of self-release and open to the full dimensions when under pressure of no greater than 20 pounds per sq. ft.	

Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit (Those Fences and Walls Meeting Section 4.5.110.12.a)			
	Fencing or Walls Allowed?		
Fence or Wall Type	**Floodway Fringe**	**Floodway**	**Federal Flood Zones AH and AO**
G	Yes for fence only, provided a licensed engineer provides documentation showing that the fence is designed to collapse under anticipated flood Base Flood conditions. The engineering analysis shall consider debris impact, size of posts, and velocity and depth of flood waters.	No	Yes for fence only, provided a licensed engineer provides documentation showing that the fence is designed to collapse under anticipated flood Base Flood conditions. The engineering analysis shall consider debris impact, size of posts, and velocity and depth of flood waters.

A = Open barb or barbless wire. Open means no more than one horizontal strand per one ft. of height.
B = Open pipe or rail fencing (e.g. corrals). Open means rails occupy less than 10 percent of the fence area and posts are spaced no closer than 8 ft. apart.
C = Other wire, pipe, or rail fencing (e.g. field fence, chicken wire, etc.) which does not meet the requirements of "A," or "B," above.
D = Chain link fencing
E = Continuous Wood Fencing
F = Masonry Walls (excluding retaining walls, as retaining walls are required by Section 4.5.110.12 to meet the same standards as other building, paving, and grading activities)
G = Collapsible Fencing

4.5.110.13 - Temporary Structures, Storage, and Bridges -

A Floodplain Development Permit is required for construction or placement of temporary structures, temporary storage associated with nonresidential uses, and temporary bridges located in Special Flood Hazard Areas: *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(1-3)]*

a. Temporary structures, not including bridges, shall be limited by the Floodplain Administrator or designee as to time of service, with the intent that the time of service is limited to the minimum time necessary to accomplish the temporary activity, per the provisions in "c," below. This time of service shall not exceed 90 days. The Floodplain Administrator or designee is authorized to grant extensions for demonstrated cause; such cause shall reaffirm the temporary nature of the structure. Temporary structures shall be anchored to prevent flotation, collapse, or lateral movement. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(1)]*

b. Temporary storage of fill shall be limited by the Floodplain Administrator or designee as to time of service, with the intent that the time of service is limited to the minimum time necessary to accomplish the temporary activity, per the provisions in "c," below. This time of service shall not exceed 90 days and the amount of temporary fill shall be limited to no more than 50

cubic yards. The Floodplain Administrator or designee is authorized to grant extensions for demonstrated cause; such cause shall reaffirm the temporary nature of the storage. Stored material shall be anchored or contained to prevent flotation or release outside the assigned storage area. Hazardous materials priority persistent pollutants identified by the Oregon Department of Environmental Quality shall not be stored in the 0.2-ft. Floodway. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(2)]*

c. Temporary encroachments, including bridges, in the 0.2-ft. Floodway require approval of a Floodplain Development Permit subject to conditions "1" through "7", below. No CLOMR/LOMR is required[1]. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

1. The Floodplain Development Permit shall stipulate the days and dates the Development will be on site. The Floodplain Administrator or designee shall determine the permissible period of encroachment based on the existing and expected hydrologic conditions of the 0.2-Floodway, as well as the type of and need for the encroachent. The Floodplain Administrator or designee is authorized to grant extensions for demonstrated cause; such cause shall reaffirm the temporary nature of the Development and be based on the hydrologic conditions expected during the period of extension. The Floodplain Administrator or designee is authorized to place limits on the volume of materials placed within the 0.2-ft. Floodway as a temporary encroachment and, when making such a determination, shall consider the existing and expected hydrologic conditions during the period of encroachment, as well as the type of and need for the encroachment;*[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

2. A flood warning plan for the project shall be in place to allow equipment to be evacuated from the site and placed outside the Floodplain prior to inundation by flood waters; *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

3. Placement of equipment in the Floodway shall be restricted to only that equipment which is absolutely necessary for the purposes of the project. All other accessory equipment and temporary structures (i.e.,

[1] No CLOMR/LOMR will be required because there is no need to modify the FIRM due to the temporary condition of the encroachment. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3).]*

construction trailers) shall be restricted from the 0.2-ft. Floodway. Structures should be placed on site so that flood damages are minimized. In instances where the Floodplain Administrator or designee believes that evacuation isn't practical, the Floodplain Administrator or designee is authorized to require anchoring of construction trailers;*[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

4. Temporary changes to the Floodplain under a one percent chance flood event (100-year flood) shall be identified; and *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

5. The applicant shall be notified in writing that they may be liable for any flood damages resulting from the temporary structure. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

4.5.110.14 - Non-conversion of Enclosed Areas Below the Lowest Floor -

To ensure that the areas below the Base Flood Elevation (BFE) continue to be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation without first becoming fully compliant with the provisions of this chapter and Chapter 2.11 - Floodplain Development Permit in effect at the time of conversion, the Floodplain Administrator or designee shall:*[Model Ordinance Section V-S(A-C)]*

a. Determine which applicants for New Construction and/or Substantial Improvements have fully enclosed areas below the Lowest Floor that are 5 ft. or higher; *[Model Ordinance Section V-S(A-C)]*

b. Require the property owner to enter into a "NON-CONVERSION AGREEMENT FOR CONSTRUCTION WITHIN SPECIAL FLOOD HAZARD AREAS" or equivalent with the City of Corvallis. The agreement shall be recorded with Benton County as a deed restriction. The non-conversion agreement shall be reviewed and approved by the Floodplain Administrator or designee; and *[Model Ordinance Section V-S(A-C)]*

c. Have the authority to inspect any area of a structure below the Base Flood Elevation to ensure compliance upon prior notice of at least 72 hours. *[Model Ordinance Section V-S(A-C)]*

Section 4.5.120~~d.~~ - SUBDIVISIONS, LAND PARTITIONS, AND PROPERTY LINE ADJUSTMENTS~~Subdivisions, Land Partitions, and Property Line Adjustments~~ -

Subdivisions, Lot Line Adjustments, and Minor Land Partitions that would create parcels or lots that cannot be developed in conformance with the regulations contained in this Chapter are prohibited, with the exception of lots created for public park purposes. See Section 4.5.90.03.

~~Section 4.5.60 - STANDARDS FOR DEVELOPMENT IN STEEPLY SLOPED AREAS~~

(ENTIRE SECTION MOVED TO BE PART OF A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)

~~Section 4.5.70 - STANDARDS FOR DEVELOPMENT IN LANDSLIDE HAZARD AREAS -~~

(ENTIRE SECTION MOVED TO BE PART OF A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)

~~Section 4.5.80 - HILLSIDE DEVELOPMENT STANDARDS~~

(ENTIRE SECTION MOVED TO BE PART OF A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)

4.5.13~~9~~0 - MAP REFINEMENTS

4.5.13~~9~~0.01 - Map Refinements Defined -

Map Refinements are adjustments made through professional analyses to refine the actual boundaries of some Natural Resources and Natural Hazards. Map Refinements must be made in accordance with the provisions in Chapter 4.5 - ~~Natural Hazard and Hillside Development~~ Floodplain Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. ~~and~~ The Map Refinements governed by this chapter are specifically allowed to determine the location and extent of the:

a. 0.2-ft. Floodway;

b. 1.0-ft. Floodway, in accordance with FEMA regulations; and

c. 100-year Floodplain~~Floodway Fringe~~, in accordance with FEMA regulations;

~~**d.** Landslide Hazard areas;~~

~~**e.** Slopes;~~

~~**f.** Top-of-bank of Streams and rivers;~~

~~**g.** Riparian Corridors, once Top-of-bank is accurately determined; and~~

~~**h.** Wetlands, through delineations approved by the Oregon Department of State Lands.~~

4.5.1390.02 - Map Refinements Provisions -

a. Map Refinement provisions for the 0.2-ft. Floodway, the 1.0-ft. Floodway, and the 100-year Floodplain~~Floodway Fringe, Landslide Hazard areas, and slopes~~ are outlined below. Map Refinement provisions for Top-of-bank, Riparian Corridor, and Wetland boundaries are outlined in Chapter 4.13 - Riparian Corridor and Wetland Provisions. Map Refinement provisions for Landslide Hazard areas and slopes are outlined in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Map Refinements are also adjustments to resolve registration issues that may occur between different GIS layers or maps, or adjustments that may be necessary to comply with updates to applicable Flood Insurance Rate Maps, Digital Flood Insurance Rate Maps, and Flood Insurance Studies issued by the Federal Emergency Management Agency. *[Allowed by current Code now, but provides further clarity]*

b~~a~~. **Floodplain and Floodway Boundaries** - The precise locations of Floodplain and Floodway boundaries are determined as follows:

1. 0.2-ft. Floodway - Surveyed and mapped by a licensed surveyor or civil engineer, using two-ft. contour intervals established by the survey, and outlining a river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than 0.2 ft.

2. 1.0-ft. Floodway - Surveyed and mapped by a licensed surveyor or civil engineer, using two-ft. contour intervals established by the survey, and outlining a river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than one ft.

3. 100-Year Floodplain -

   a) 100-Year Floodplain in Areas Studied by FEMA and Addressed by Current Federal Insurance Rate Map (FIRM) -

      1) Surveyed and mapped by a licensed surveyor or civil engineer, using the Base Flood E~~e~~levations established by the Federal Emergency Management Agency (FEMA) and two-ft. contour intervals established by the survey~~.~~; or

2) FEMA-approved adjustments as specified in "i," and "ii," below. However, no adjustments to the FIRM other than those specified in "i," and "ii," below may occur through the Map Refinement process.

i) Adjustments needed to comply with updates to applicable Flood Insurance Rate Maps, Digital Flood Insurance Rate Maps, and Flood Insurance Studies issued by the Federal Emergency Management Agency. *[Allowed by current Code now, but provides further clarity]*

ii) Adjustments needed to reflect Letters of Map Amendment (LOMAs) and Letters of Map Revision (LOMRs) approved by the Federal Emergency Management Agency (FEMA). The Director shall only correct the 100-year Floodplain portion of the City's maps to exactly reflect FEMA decisions. *[This provision was moved from the Map Correction section because it involves official FEMA decisions that the City is mandated to implement.]*

b) 100-Year Floodplain in Areas Not Studied by FEMA and Not Addressed by Current Federal Insurance Rate Map (FIRM) - Sections 4.5.20.01.b and 4.5.50.03.p require Floodplain Studies to identify the 100-year Floodplain and related information in areas that are unmapped by the current FEMA Flood Insurance Study for Benton County and Incorporated Areas, dated, June 2, 1011, and are, therefore, not shown on the current Federal Insurance Rate Map (FIRM). Provided the information is entirely consistent with Sections 4.5.20.01.b and 4.5.50.03.p, the Map Refinement process can be used to map the 100-yr. Floodplain for these unstudied and unmapped areas. Once identified and approved by the Floodplain Administrator or designee, these newly mapped areas shall be reflected in the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and graphically depicted as High Protection Floodplain on the Natural Hazards Map.

~~**b. Landslide Hazard Area Boundaries** - The precise locations of Landslide Hazard area boundaries are determined by one of the following two methods:~~

~~1. Site Assessments and/or Geotechnical Reports, as required per Section 4.5.70; or~~

~~2. Information provided by the Oregon Department of Geology and Mining Industries (DOGAMI), once it has been developed and finalized by DOGAMI.~~

~~If these areas are not precisely mapped by one of these two methods, the 500-ft. setback required by Section 4.5.70.02 shall be maintained.~~

~~**c. Slope Boundaries -** The precise locations of the steep slope boundaries are determined by one of the following two methods, consistent with the provisions of Section 4.5.60.03:~~

~~1. Using the information from the Natural Hazards database and creating a topographic map of the development site showing two-ft. contour intervals; or~~

~~2. Using a topographic survey, showing two-ft. contour intervals, prepared and stamped by a licensed surveyor or civil engineer.~~

4.5.13~~9~~0.03 - Map Refinement Procedures

a. Adjustments to maps consistent with the provisions of Sections 4.5.13~~9~~0.01 and 4.5.13~~9~~0.02, above, are considered to be Map Refinements and may be Ministerially adjusted on the relevant maps, with no land use process required other than a demonstrated adherence to the provisions of S~~s~~ections 4.5.13~~9~~0.01 and 4.5.13~~9~~0.02.

b. Adjustments to maps to address FEMA-approved Letters of Map Amendment (LOMAs) and Letters of Map Revisions (LOMRs) for 100-year Floodplain information may be requested following written verification of a LOMA or LOMR approved by the Federal Emergency Management Agency (FEMA). When the FEMA determines that a LOMA or LOMR should be approved, and written documentation of the approval is provided to the Community Development Director, the Director shall ensure that changes reflected in the LOMA or LOMR are reflected in the City's affected maps and databases. *[This provision was moved from the Map Correction section because it involves official FEMA decisions that the City is mandated to implement.]*

4.5.14~~0~~0 - MAP CORRECTIONS

No Zone Change or Comprehensive Plan Map Amendment shall be required to accomplish Map Corrections approved in accordance with the provisions outlined in this Section.

a. Decisions regarding Map Correction requests shall be made by the Community Development Director, as specified in S~~s~~ections 4.5.14~~0~~0.01 and 4.5.14~~0~~0.02, below. Upon approval of a Map Correction request, the Director shall ensure that

changes are reflected in the City's affected maps and databases. Notice of such Map Correction shall be provided to decision-makers as outlined in Section 4.5.14~~0~~0.b, below.

b. When requests for five Map Corrections on any Natural Hazard or Natural Resource for which a Map Correction is allowed have been submitted to and decided upon by the Community Development Department Director, or approximately twice a year, whichever is sooner, the Map Correction requests shall be summarized in an informational memo for decision-makers so that they may review them for tracking purposes in accordance with Comprehensive Plan Policy 4.2.6. This memo shall be shared with the Corvallis Planning Commission and City Council for Map Correction requests on lands within the City limits; and with the Corvallis and Benton County Planning Commissions, the Corvallis City Council, and the Benton County Board of Commissioners for Map Correction requests on lands within the Urban Fringe.

4.5.14~~0~~0.01 - Map Corrections Defined

a. A Map Correction is not the type of adjustment described in the Map Refinement provisions of Section 4.5.13~~9~~0, above. A Map Correction is, however, an actual correction to maps referencing Natural Hazards or Natural Resources other than Significant Vegetation areas, where it is found that the map depiction does not reflect the Natural Features Inventory. As the Natural Features Inventory (NFI) was the basis for developing the City's maps that reference Natural Hazards and Natural Resources, a correction to the NFI for Natural Hazards or Natural Resources other than Significant Vegetation areas could result in a correction to the related maps. These maps include the Comprehensive Plan Map, Local Wetlands Inventory Map, Official Zoning Map, Natural Hazards Map, or Riparian Corridors and Wetlands Map.

b. Map Correction provisions for the100-year Floodplain ~~and Landslide Hazard areas~~ are outlined below. Adjustments to other hazards governed by this chapter are not Map Corrections, but are Map Refinements and are addressed through the provisions of Section 4.5.13~~9~~0, above. Map Correction provisions for Riparian Corridor widths and Wetland boundaries are outlined in Chapter 4.13 - Riparian Corridor and Wetland Provisions. Map Correction provisions for Landslide Hazard Areas are outlined in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

~~**a. 100-Year Floodplain -** Map Corrections for 100-year Floodplain information may be approved by the Community Development Department Director subsequent to the approval of a Letter of Map Amendment (LOMA) by the Federal Emergency Management Agency (FEMA). The Director shall only correct the 100-year Floodplain portion of the City's maps to exactly reflect~~

~~FEMA decisions.~~ *[This provision was moved to the Map Refinement section because it involves official FEMA decisions that the City is mandated to implement.]*

~~**b. Landslide Hazard Areas** - Landslide Hazard area boundaries may be refined through the Map Refinement procedures outlined in 4.5.90, above. However, if technical data demonstrates that no Landslide Hazard exists within or near an area identified as a potential Landslide Hazard on the City's maps, a Map Correction may be accomplished to delete the Landslide Hazard indication from the maps. Such technical data must be from:~~

~~1. A site assessment and geotechnical report; or~~

~~2. The Oregon Department of Geology and Mining Industries (DOGAMI).~~

4.5.14~~0~~0.02 - Map Corrections Procedures for 100-year Floodplain -

~~**a. 100-Year Floodplain** -~~
~~Map Corrections for 100-year Floodplain information may be requested following written verification of a Letter of Map Amendment (LOMA) approved by the Federal Emergency Management Agency (FEMA). When the FEMA determines that a LOMA should be approved, and written documentation of the approval is provided to the Community Development Director, the Director shall ensure that changes reflected in the LOMA are reflected in the City's affected maps and databases.~~ *[This provision was moved to the Map Refinement section because it involves official FEMA decisions that the City is mandated to implement.]*

~~**b. Landslide Hazard Areas** - There are two procedures available for a Map Correction involving the removal of a Landslide Hazard area from the Natural Hazards Map.~~

~~1. Removal of a Landslide Hazard Area from Determination by the Oregon Department of Geology and Mining Industries (DOGAMI) -~~

~~If in finalizing its data and maps regarding Landslide Hazard areas the Oregon Department of Geology and Mining Industries (DOGAMI) determines that no Landslide Hazard exists within or near an area identified as a potential Landslide Hazard on the Natural Hazards Map, then a Map Correction to remove indication of the Landslide Hazard area shall be done by the Community Development Department Director, following written verification of the DOGAMI's determination. When such written documentation of the determination is provided to the Director, the Director shall ensure that the changes reflected by the DOGAMI decision are reflected in the City's affected maps and databases.~~

2. ~~Removal of a Landslide Hazard Area from Determinations Reached by a Site Assessment and Geotechnical Report -~~

~~If a property owner or property owner's legal representative provides the Community Development Department Director with the items listed in "a," below, a request to remove indication of a Landslide Hazard area from the Natural Hazards Map and other affected maps may be considered as outlined in "b," and "c," below.~~

a) ~~For a Map Correction request to consider removal of a Landslide Hazard from the Natural Hazards Map and other related maps, the following information is required:~~

1) ~~A Site Assessment and Geotechnical Report which meet the criteria identified in sections 4.5.60.04 and 4.5.60.05. In addition to the items identified in Section 4.5.60.05, the Geotechnical Report shall specifically address the lack of presence, characteristics, and/or precise location of the identified hazard(s) on the subject property which is/are depicted on the Natural Hazards Map. If other reports are called for by the Site Assessment, these reports shall also be submitted; and~~

2) ~~An indemnification and release agreement in accordance with the provisions of Section 4.5.70.04;~~

b) ~~For lands within the City limits, Map Correction requests shall be reviewed by the Building Official and City Engineer, in coordination with the Community Development Department. The Community Development Director shall make the final decision. For lands within the Urban Fringe, Map Correction requests shall be reviewed by the Building Official and City Engineer, in coordination with the Corvallis Community Development Department and the Benton County Development Department. For the Urban Fringe lands, the Corvallis Community Development Department Director shall also make the final decision.~~

c) ~~To approve a Map Correction request, the Director must find that:~~

1) ~~The information required by "a," above, has been provided and is complete;~~

2) ~~The required technical reports and recommendations sufficiently demonstrate that there is no Landslide~~

~~Hazard on or near the area identified on the Natural Hazards Map; and~~

~~3) The required technical reports and recommendations sufficiently demonstrate that development on the subject area would not increase landslide risks on the development site, or upon neighboring properties.~~

CHAPTER 4.6
SOLAR ACCESS

Section 4.6.10 - PURPOSES

Solar energy can make a significant long-term contribution to the City's energy supply. This Chapter is intended to encourage the use of solar energy by protecting Solar Access in new Residential Subdivisions and residential Planned Developments.

Section 4.6.20 - EXEMPTIONS

Residential buildings constructed or lots developed in locations noted below are exempt from the requirements of this Chapter:

a. On north-facing slopes of 10 percent or more;

b. On portions of sites where Solar Access, as defined in Chapter 1.6 - Definitions, is unavailable due to shading from Natural Resources or Natural Hazards subject to the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

c. On sites where density is concentrated because density is being transferred from an area on the same development site that is simultaneously being rezoned to Conservation - Open Space; or

d. On sites which contain Natural Resources or Natural Hazards subject to the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, and where:

1. The developed portion of the site will exceed minimum required density by at least 50 percent for properties designated as Extra-low, Low, or Medium Density Residential; and

2. The developed portion of the site will exceed minimum required density by by at least 25 percent for properties designated as Medium-high or High Density Residential.

Section 4.6.30 - PERFORMANCE STANDARDS

Residential Subdivisions and Planned Developments on parcels of more than one acre shall be designed so that Solar Access Protection, as defined in Chapter 1.6 - Definitions, is available consistent with the following:

a. No reduction in Solar Access at ground level of the south face of existing residential buildings adjacent to the development;

b. Within Residential Subdivisions, a minimum of 80 percent of lots contain sufficient east/west dimension to allow orientation of the following minimum ground floor lengths of a building to use solar energy:

1. 30 lineal ft. per unit for Single-family Detached dwelling units; and

2. 15 lineal ft. per ground floor unit for dwelling units other than Single-family Detached dwelling units.

c. In Planned Developments, a minimum of 80 percent of the buildings contain:

1. Sufficient east/west dimension to allow the following minimum ground floor lengths of the building to use solar energy:

   a) 30 lineal ft. per unit for Single-family Detached dwelling units; and

   b) 15 lineal ft. per ground floor unit for dwelling units other than Single-family Detached.

2. Additionally, for Single-family Detached dwelling units, a minimum of 100 sq. ft. of roof area, for the dwelling unit and/or the garage, which could allow the utilization of solar energy.

Section 4.6.40 - REDUCTION OR WAIVER OF STANDARD IN SUBDIVISIONS

A reduction or waiver from the requirements of Section 4.6.30 above may be granted by the Planning Commission to the minimum extent necessary to:

a. Reflect development constraints associated with complying with the hillside development provisions of Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions or reflect physical land development constraints related to the shape of the site;

b. Meet City design requirements for provision of landscaping and location of buildings consistent with minimum setbacks; or

c. Address sites where site planning to achieve Solar Access is negatively affected by the construction of streets, utilities, bridges, bicycle, and pedestrian facilities that are required by the City of Corvallis Transportation Plan, or other adopted City Plan, or that are necessary in order to maintain an acceptable functional classification of roadways adjacent to the property. It must be shown that no other reasonable location is available for the required infrastructure.

Section 4.6.50 - ADJUSTMENTS TO IMPLEMENT SOLAR STANDARD IN SUBDIVISIONS

For Residential Subdivisions approved by the Planning Commission or City Council, modifications to solar provisions on a lot-by-lot basis may be authorized by the Director without public notice under any of the following conditions:

a. Where the affected property is developed and the change would not affect an existing dwelling;

b. Where the affected property is vacant and the Director finds that the proposed change will still maintain a 1400 sq. ft. building area on the affected lot where the dwelling located in this area would have Solar Access as outlined in Section 4.6.30; or

c. Where the proposed change would not increase shade on the affected dwelling more than that resulting from more than a six-ft.-high fence on the property line; or

d. Where the Director finds that an error in the original solar calculations has been made so that a two-story house cannot be built within the setbacks on the height-restricted lot.

Any other modifications shall be in accordance with Chapter 2.12 - Lot Development Option.

Section 4.6.60 - REDUCTION OR WAIVER OF STANDARD IN PLANNED DEVELOPMENTS

For residential Planned Developments, a reduction or waiver from the requirements of Section 4.6.30 above may be granted by the Planning Commission based on the provisions of Section 4.6.40 above or to the minimum extent necessary to:

a. Meet a broad range of residential needs by encouraging use of innovative site development techniques and a mix of Housing Types;

b. Address future housing needs in the community by encouraging Affordable Housing, as defined in Chapter 1.6 - Definitions, to increase housing choices;

c. Reflect development constraints associated with complying with the hillside development provisions of Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions or reflect physical land development constraints related to the shape of the site;

d. Meet City design requirements for provision of landscaping and location of buildings consistent with minimum setbacks; or

e. Address sites where site planning to achieve Solar Access is negatively affected by the construction of streets, roads, utilities, bridges, bicycle, and pedestrian facilities that are required by the City of Corvallis Transportation Plan, or other adopted City Plan, or that are necessary in order to maintain an acceptable functional classification of roadways adjacent to the property. It must be shown that no other reasonable location is available for the required infrastructure.

A reduction or waiver may not be granted under this Section unless the applicant demonstrates that the loss of Solar Access for current and future generations has been mitigated by a substantial increase in energy efficiency of the proposed dwellings over Building Code requirements.

EXCERPT

CHAPTER 4.7
SIGN REGULATIONS

Section 4.7.10 - PURPOSES

The City's sign regulations serve the community by doing the following:

a. Requiring sound construction and maintenance of signs, and by limiting the number of visual images communicated;

b. Providing an equitable opportunity to use signs as a communication medium outside of public rights-of-way;

c. Providing standards for location, size, type, and number of signs; and

d. Providing reasonable limits on the magnitude and extent of graphic communication presented to the public.

Section 4.7.20 - OFFENSES

Any person who erects, installs, maintains, alters, repairs, removes, or uses a sign in violation of the provisions in this Chapter or of the Corvallis Building Code shall be committing a Class B infraction subject to the penalties set forth in Section 4.7.120 of this Chapter. Any person who causes or permits any of these actions shall also be in violation of these regulations.

Section 4.7.30 - SIGN MAINTENANCE REQUIRED

Signs shall be maintained to protect the public safety, present a neat appearance, and prevent deterioration.

a. A permit is not required for normal maintenance and repair of a sign or sign structure, such as painting, repainting, and cleaning.

b. A permit is required for structural and electrical modifications, including changes of sign size, shape, and location.

b. The Director shall review the Sign Permit application to ensure it is complete and accompanied by the appropriate fee, and that the proposed sign complies with the requirements of this Code and other City ordinances. A Permit shall be issued only when all of these criteria have been met. Additionally, unless exempt per Section 2.11.40.e, signs in Special Flood Hazard Areas shall obtain a Floodplain Development Permit per Chapter 2.11 - Floodplain Development Permit.

c. An approved Sign Permit does not replace, supersede, or waive structural or electrical standards and permits required by the Corvallis Building Code. These other permits must also be obtained prior to work on the installation of a sign.

d. The applicable Permit review fee shall be doubled if sign installation is begun before the Permit is obtained. Payment of the double fee shall not relieve any person from full compliance with these regulations.

e. The Permit shall expire if a sign is not installed within 180 days from the date of a Sign Permit application approval. Re-application shall include a new, fully completed application form and a new Permit review fee. The application must comply with the findings in "b," above, including any amendments to these regulations adopted since the previous Permit approval.

f. An approved Sign Permit may be revoked by the Director if the sign is not constructed and installed as approved, if incorrect information was provided on the application, or if the City approved the Permit in error. A decision of the Director may be appealed to the Land Development Hearings Board in accordance with Chapter 2.19 - Appeals.

g. All signs shall be subject to inspection and reinspection by the Director. Footing inspections may be required for all signs having footings.

Section 4.7.70 - EXEMPTIONS FROM SPECIFIC REQUIREMENTS OF REGULATIONS

The following types of graphic communication are exempt from one or more requirements of this Chapter, but shall comply with other applicable provisions. They are not subject to allocation limits specified in sections 4.7.80 and 4.7.90 below. Limitations on number and size of these classes of signs, if any, are noted below.

a. Signs erected in a public right-of-way by an agent of the City, Benton County, the State of Oregon, the U.S. Government, or a public utility are exempt from the provisions of these regulation. Exempt signs include:

EXCERPT

CHAPTER 4.8
MANUFACTURED DWELLING FACILITY STANDARDS

Section 4.8.10 - PURPOSES

The provisions in this Chapter are established to ensure a safe and healthful living environment for residents of Manufactured Dwelling Facilities and to ensure that Manufactured Dwelling Facilities can provide affordable quality housing compatible with adjacent land uses. In addition, these provisions are intended to ensure compliance with State regulations governing review of Manufactured Dwelling Facility development.

Section 4.8.20 - AREA REQUIREMENTS

a. The minimum size for a Manufactured Dwelling Facility, as defined in Chapter 1.6 - Definitions, is five acres.

b. The minimum size for a Manufactured Dwelling space is 3,000 sq. ft. ORS 446.100(c), as amended, requires that the space be at least 30 ft. wide and 40 ft. long.

Section 4.8.30 - PERMITTED STRUCTURES

a. Manufactured Dwellings and Mobile Homes, as defined in Chapter 1.6 - Definitions.

b. Accessory Structures - Structures customarily incidental to the Primary Use in accordance with Chapter 4.3 - Accessory Development Regulations.

Section 4.8.40 - SETBACK AND SEPARATION FOR THE FACILITY PERIMETER

a. **Setback between Facility Structures and Abutting Properties** - Between the abutting property and any Dwelling or Accessory facility structure or facility road a minimum setback shall be required equal to the rear yard setback specified by the zone of the abutting property, but not less than five ft.

b. **Setback between Facility Structures and a Public Street Right-of-Way** - Between the public right-of-way and any Dwelling or Accessory facility structure, an average setback of 25 ft. shall be required along the public street, with a minimum setback equal to the front yard setback of the zone.

c. Public and Private Facilities

1. Each Manufactured Dwelling Facility space shall be provided with water, sanitary sewer, storm drainage, and street facilities; and electrical power, telecommunication, cable television, and natural gas services in accordance with Chapter 4.0 - Improvements Required with Development.

2. Applications for Manufactured Dwelling Facilities that would adjoin an open, natural drainageway or would be located in a F~~f~~loodway F~~f~~ringe shall be reviewed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions.

d. Play Areas - A separate play area shall be provided in all Manufactured Dwelling Facilities that accommodate children unless each Manufactured Dwelling Space has a minimum size of 4,000 sq. ft. A required play area shall be at least 2,500 sq. ft. in area with no dimension less than 30 ft. At least 100 sq. ft. of play area shall be provided for each Manufactured Dwelling space less than 4,000 sq. ft.

e. Space Coverage - Not more than 60 percent of a Manufactured Dwelling space shall be occupied by a Dwelling and any other attached or detached structure used in conjunction with such Dwelling.

f. Decks - Each Manufactured Dwelling space shall have at least one private or semi-private outdoor space adjacent to the Dwelling, constructed of concrete, asphalt, flagstone, wood, or other equivalent surface material totaling at least 120 sq. ft. of area and not less than eight ft. wide in any dimension.

g. Skirting - Each Mobile Home or Manufactured Dwelling located in a Manufactured Dwelling Facility shall have continuous skirting that, in design, color, and texture, appears to be an integral part of the exterior walls or the foundation of the Dwelling.

Section 4.8.80 - LANDSCAPE PLAN

A landscape plan is required prior to issuance of Building Permits. This plan shall be drawn to scale and shall show the location of existing trees and vegetation proposed to be removed or to be retained on the site, the location and design of landscaped areas, the varieties and sizes of trees and plant materials to be planted on the site, contour lines indicating any proposed earth sculpting, and other pertinent landscape information. The plan shall also be consistent with the provisions outlined in Section 4.8.90.

Section 4.8.90 - LANDSCAPING, NATURAL HAZARDS, MINIMUM ASSURED DEVELOPMENT AREA (MADA), AND NATURAL RESOURCES

Unless specified more strictly in this Chapter, landscaping shall be consistent with the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting~~.~~, and Chapter 2.11 - Floodplain Provisions. Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

EXCERPT
CHAPTER 4.9
ADDITIONAL PROVISIONS

Section 4.9.10 - PURPOSES

Some types of Uses have special development standards to improve their compatibility with surrounding land uses. In certain other situations, there are exceptions to the regulations not addressed elsewhere in the Code. This Chapter includes special development standards for Manufactured Dwellings on individual lots, Minor Utilities, Accessory Dwelling Units in residential zones, Wireless Telecommunication Facilities, and Commercial Day Care and School facilities. The Chapter also includes exceptions to building heights and projections, and Housing Type variation requirements per residential zone.

Section 4.9.20 - MANUFACTURED DWELLING DESIGN STANDARDS

Manufactured Dwellings as defined in Chapter 1.6 - Definitions are allowed in all residential zones. Manufactured Dwellings placed on individual lots shall meet the following criteria:

a. Multi-sectional structure, such as a double-wide, two-story, or L-shaped structure, and enclosing a floor area of not less than 1,000 sq. ft.;

b. Backfill style foundation or skirting of pressure-treated wood, masonry, or continuous concrete footing wall construction, complying with the minimum set-up standards of the adopted Manufactured Dwelling Administrative Rules, Chapter 918, as amended;

c. Pitched roof with a minimum three ft. in height for each 12 ft. in width;

d. Non-reflective siding and roofing;

e. Manufacturer's certification that exterior thermal envelopes meet performance standards specified by state law. The applicable Oregon Revised Statutes that pertain to Manufactured Dwellings and facilities are ORS 446.155 through ORS 446.285, and ORS 455.010, as amended. The Oregon Administrative Rule pertaining to Manufactured Dwellings is OAR Chapter 918, Division 500-520, as amended. The State of Oregon Manufactured Dwelling and Park Specialty Code, which is a min/max code, governs construction requirements for Manufactured Dwellings and Mobile Homes.;

h. **Noise Reduction** - All applications shall contain documentation showing that the noise levels from the proposed facility will meet the following standards:

1. A facility located on a site adjacent to a residential development zone or existing Residential Uses must limit noise levels to 35 DBA or less, as measured at the residential property line(s).

2. A facility located on any other site must comply with the industrial and commercial quiet-area noise standards established by the Oregon State Department of Environmental Quality, OAR 340-35-035, Table 9, as amended.

i. **Lighting** - No lighting of Wireless Telecommunication Facilities is allowed, except as required by the Federal Aviation Administration (FAA). Required lighting shall be shielded from the ground, to the extent practicable. The application for a facility subject to FAA requirements shall document compliance with FAA requirements.

j. **Signage** - Warning and safety signs, up to three sq. ft. in area, are allowed. All other signs are prohibited.

k. **Site Access** - Site access is subject to the provisions in Section 4.1.40 of Chapter 4.1 - Parking, Loading, and Access Requirements. The facility operator shall implement measures to prohibit unauthorized site access.

l. **Decommissioning** - A facility shall be removed by the facility owner or operator within six months from the date the facility ceases to be operational. The Director may grant a six-month extension to this requirement. Requests for extensions must be in writing and must be received by the Director within the initial six-month period. The property owner shall bear the ultimate responsibility for removal of decommissioned facilities.

m. **Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources -** Landscaping, Natural Hazards, Minimum Assured Development Area (MADA), and Natural Resources shall be addressed in accordance with Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

EXCERPT

CHAPTER 4.10
PEDESTRIAN ORIENTED DESIGN STANDARDS

Section 4.10.10 - PURPOSE

The Pedestrian Oriented Design Standards in this Chapter are established to do the following:

a. Implement applicable policies of the Comprehensive Plan;

b. Foster human-scale development that emphasizes pedestrian rather than vehicular features;

c. Promote pedestrian oriented buildings, pedestrian amenities, and landscaping that contribute positively to an appealing streetscape;

d. Promote an environment where developed areas, recreational areas, and multi-use paths are accessible to all;

e. Promote pedestrian safety by increasing the visibility and vitality of pedestrian areas;

f. Ensure direct and convenient access and connections for pedestrians and bicyclists;

g. Augment the sidewalk and multi-use path system for pedestrians;

h. Provide a connected network of sidewalks and multi-use paths;

i. Encourage street activity to support livable neighborhoods and vital commercial areas;

j. Ensure that developments contribute to the logical continuation of the City's street and block form and/or establish block patterns in parts of the City where they do not exist;

k. Provide a sense of diversity and architectural variety, especially in residential areas, through the use of varied site design layouts and building types and varied densities, sizes, styles, and materials;

and do not require passage through a garage or carport to gain access to the dwelling; or

2. Exceptions:

a) For a Flag Lot, as defined in Chapter 1.6- Definitions (or a flag parcel) existing prior to December 31, 2006, the primary building entrance is located within 100 ft. of the lot's (or parcel's) accessway.

b) On flag lots, (as defined in Chapter 1.6- Definitions (or flag parcels) zoned RS-3.5, RS-5, RS-6, RS-9, or RS-9(U), and platted consistent with Section 4.4.20.03.b.1 after December 31, 2006, the primary building entrance is directly accessed from a public street right-of-way or private street tract by a sidewalk or multi-use path less than 200 ft. long and is otherwise consistent with Sections 4.4.20.03.b.1 and 4.10.50.01.a.1, above.

c) For a flag lot, (as defined in Chapter 1.6- Definitions (or flag parcel), that was created consistent with Section 4.4.20.03.b.2, the primary building entrance is located within 100 ft. of the lot's (or parcel's) accessway and is otherwise consistent with Sections 4.4.20.03.b.2 and 4.10.50.01.a.1, above.

b. **Privacy** - If the side wall of a dwelling or accessory dwelling is on or within three ft. of the property line, ground floor windows or other openings that allow for visibility into the side yard of the adjacent lot shall not be allowed. Windows that do not allow visibility into the side yard of the adjacent lot, such as a clerestory window or a translucent window, are allowed.

c. **Windows and Doors** - Any facade facing streets, sidewalks, and multi-use paths shall contain a minimum area of 15 percent windows and/or doors. Facades referenced in this provision include garage facades. Gabled areas need not be included in the base wall calculation when determining this minimum 15 percent requirement.

d. **Grading (Cuts and Fills)** - Structures and on-site improvements shall be designed to fit the natural contours of the site and be consistent with the Natural Hazards and Natural Resource Provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside~~

~~Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

4.10.50.02 - Maximum Widths of Street-facing Garages/Carports, Placement, and Materials

a. Maximum Widths of Street-facing Garages/Carports

1. Lots ≥ 50 Ft. in Width - For dwellings with front-loaded garages/carports, the width of the garage wall or carport facing the street shall be no more than 50 percent of the width of the dwelling's street-facing facade. Front-loaded garages/carports are attached garages/carports with entrances facing the same street as the dwelling's entrance. Additionally, the term garage wall pertains to the whole wall and not just the doors. See Figure 4.10-2A - Unacceptable Width of Street-facing Garage on a Lot ≥50 ft. and Figure 4.10-2B - Acceptable Width of Street-facing Garage on a Lot ≥50 ft.

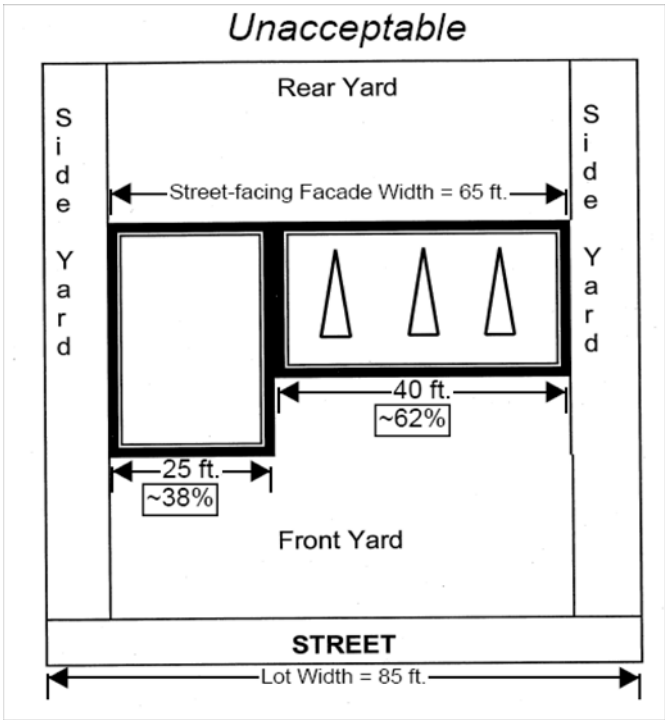


Figure 4.10-2A - Unacceptable Width of Street-facing Garage on a Lot >50 ft. Wide

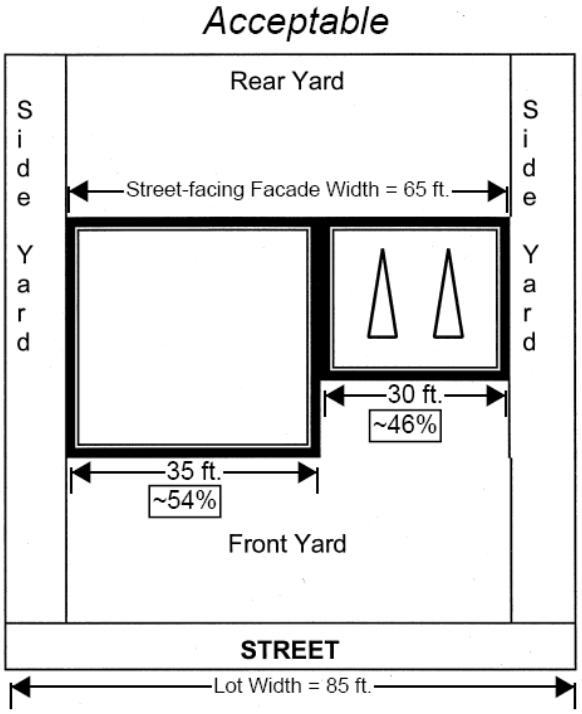


Figure 4.10-2B - Acceptable Width of Street-facing Garage on a Lot >50 ft. Wide

Screening, and Lighting shall be met.

d. **Neighborhood Center (NC) Zone Special Provisions** - Buildings in the Neighborhood Center (NC) Zone shall comply with the following additional standards. See Figure 4.10-20 - Shopping Streets for context:

1. Buildings shall be oriented to designated Shopping Streets, public open space, or a public park; and

2. On designated Shopping Streets in the Neighborhood Center (NC) Zone, 80 percent of the building front shall be within the maximum setback. The maximum setback may be waived if pedestrian amenities occupy the extended setback area, as shown in Figure 4.10-19 - Site Development Element Locations. Pedestrian amenities are defined in Section 4.10.70.05.

e. **Exception for Enhanced Pedestrian Environment** - Within a Minor Neighborhood Center, an exception to the requirement that all buildings on corner parcels front both streets may be granted through the process identified in Chapter 2.16 - Request for Interpretation if the proposed Shopping Street's design and layout can be shown to provide a pedestrian environment that is clearly superior to the environment that would result from the corner orientation. An example of a design and layout with a clearly superior pedestrian environment is one where the Shopping Street is enclosed, etc. For Major Neighborhood Centers, such exceptions may be granted, based on the same standard, through the process identified in Chapter 2.10 - Major Neighborhood Center Master Site Plan Requirements.

f. **Grading (Cuts and Fills)** - Structures and on-site improvements shall be designed to fit the natural contours of the site and be consistent with the Natural Hazards and Natural Resource Provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

4. Covered Walkways - Installation of weather protection resulting in covered pedestrian walkways between and around all buildings and between the primary building and adjacent public pedestrian facilities.

5. Notarized Letter - Where development is proposed on property adjacent to existing five-lane arterial streets or highways, recording a signed and notarized letter with the Benton County Clerk from the owner of the development site agreeing not to oppose construction of a future median or pedestrian refuge.

4.10.70.04 - Vehicle Circulation and Design Standards

a. Parking Lots -

1. Parking lots shall be placed to the rear of buildings in accordance with Section 4.10.70.02. Administrative exceptions to this standard are allowed based on the following provisions. To the extent that required parking cannot be located to the rear of the building due to other requirements of this Code or unusual site constraints, both of which are defined in the following paragraph, the amount of parking and vehicle circulation that cannot be accommodated to the rear of the building may be provided only to the side of the building.

2. Other requirements of this Code may include, but are not necessarily limited to, significant Natural Resource and Natural Hazard provisions in Chapter 2.11 - Floodplain Development Permit, Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions. Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; and Chapter 4.1 - Parking, Loading, and Access Requirements. Unusual site constraints may include parcels fronting more than two streets, irregular lot configuration, weak foundation soils, or other physical site factors that constrain development when considered with Building Code requirements.

b. Corner Parcels - Parking areas shall not be located within 30 ft. of a roadway intersection, as measured from the center of the curb radius to the edge of the parking area's curb or wheel stop.

CHAPTER 4.11
MINIMUM ASSURED DEVELOPMENT AREA (MADA)

Section 4.11.10 - PURPOSES

Procedures and standards for determination of Minimum Assured Development Area (MADA) are established in this Chapter to accomplish the following purposes:

a. Provide protection for identified significant Natural Resources and reduce risks associated with Natural Hazards as identified in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

b. Permit efficient use of land;

c. Provide flexibility and innovation in site planning to allow for an appropriate level of development on sites where Natural Resources are located;

d. Establish a balanced, clear, and objective mechanism to avoid an undue burden for property owners protecting Natural Resources on individual properties;

e. Minimize procedural delays and ensure due process in the review of development proposals.

Section 4.11.20 - GREATER RESTRICTIONS

This Chapter of this Code is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, these provisions do provide relief from other ordinances to assure a minimum development area.

Section 4.11.30 - PROCEDURES

Properties with Natural Resources or Natural Hazards subject to the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, have access to the provisions of this Chapter, provided the regulations within it are followed. Compliance with the provisions of this

1. Once a site has been developed based on the provisions of this Chapter, no increase in the MADA shall be permitted. Development may occur in phases and portions of sites may be developed. However, the total MADA shall not exceed that allowed for the site as a whole. Sites which have used the MADA provisions shall be graphically outlined on the Official Zoning Map and monitored in the City's Permit Plan tracking system.

2. Once annexed, any County development on a site that occurred prior to Annexation shall be included as part of and not in addition to the MADA calculations allowed by this Chapter.

d. Effects of Underground Utility Projects on Minimum Assured Development Area (MADA) - The following improvements shall not be counted as development against the MADA for a site:

1. Underground utility projects that have been or are proposed to be constructed in accordance with the Corvallis Capital Improvement Program (CIP) process; and

2. Areas planted with native species as mitigation for the construction impacts in "1," above.

Section 4.11.40 - Submittal Requirements for Determining Minimum Assured Development Area

Proposals for development of properties containing Natural Resources and Natural Hazards identified in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12- Significant Vegetation Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, shall contain the following information:

a. Description of the land on which the proposed development is to take place, including address, lot, block, tract, Assessor's Map and Tax Lot number, or similar description;

b. Narrative - A narrative that includes:

7. Acreage of on-site and off-site Wetland mitigation areas not already covered in “6,” above, and identification of where any off-site mitigation acres will be located;

8. Acreage and percentage of the site that is not constrained by “3,” through “7,” above;

9. Minimum and maximum residential density calculations for the site;

10. Allowed Minimum Assured Development Area (MADA) in accordance with Section 4.11.50, and proposed number of dwelling units for Residential Uses;

11. Minimum Assured Development Area (MADA) in accordance with Section 4.11.50, and proposed gross square footage of the development for nonresidential Uses;

12. Acreage of the encroachment into each Natural Resource and Natural Hazard protected in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; and the net cumulative area of the encroachments; and

13. Acreage remaining of each of the protected Natural Resources and Natural Hazards on the site.

Section 4.11.50 - STANDARDS FOR MINIMUM ASSURED DEVELOPMENT AREA

4.11.50.01 - Natural Resources and Natural Hazards Coverage and Unconstrained Area -

a. Determining Natural Resource and Natural Hazard Coverage - The Natural Resources and Natural Hazards Coverage for a site is composed of:

1. The areas identified as Highly Protected Natural Resources and Natural Hazards in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;

2. The 25-ft. setback/buffer area of Partially Protected Riparian Corridors;

3. Areas of Partially Protected Significant Vegetation, consistent with Chapter 4.12 - Significant Vegetation Protection Provisions; and

4. Areas that are not covered by Natural Resources and Natural Hazards, but that cannot be accessed or served with public utilities without encroaching into, or crossing over, protected Natural Resources and Natural Hazards.

b. Determining Unconstrained Area - The Unconstrained Area of a site is that portion which is not included in the Natural Resources and Natural Hazards coverage, as determined by the provisions of "a," above.

4.11.50.02 - Calculation of the Base Minimum Assured Development Area (MADA)

a. Residential Sites -The base Minimum Assured Development Area (MADA) for a residential site shall be calculated by multiplying the acreage of the site by the Minimum Assured Development Area (MADA) per acre as shown in Table 4.11-1 - Determining Minimum Assured Development Area (MADA) for Residential Zones, below. Acreage calculations shall be rounded to two decimal points. If a site contains multiple zones, the base Minimum Assured Development Area for each zone shall be determined. The total base Minimum Assured Development Area shall be the sum of the base Minimum Assured Development Areas for all the zones.

b. **Nonresidential Properties and Nonresidential Uses** - Nonresidential developments may use up to a 15 percent reduction in the development standards for setbacks and minimum required parking spaces required by the applicable zone where the development is located or proposed to be located.

4.11.50.04 – Priority of Encroachments into Protected Natural Resource and Natural Hazard Areas

a. Encroachments shall be allowed only to the minimum extent necessary to achieve the MADA.

b. All unconstrained lands shall be used before encroachments can occur, with the exception of areas described in Section 4.11.50.01.b.

c. **Order of Encroachments** - Encroachments shall occur sequentially into the areas of protected Natural Resources and Protected Natural Hazards based upon the priorities presented below, with encroachments into areas identified in Section 4.11.50.04.c.1 first, and Section 4.11.50.04.c.2.l last. Encroachments into areas described in each subsection shall also occur in the order presented, starting from the top of each list.

1. Access Encroachments - Encroachments are allowed to provide access to areas that do not contain Natural Resources and Natural Hazards as defined in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, where such areas cannot be accessed and/or served with public utilities without encroaching into or crossing over the protected Natural Resources and Natural Hazards. Such access encroachments shall meet the following standards:

   a) The access encroachment area shall be less than 25 percent of the non-constrained area being accessed via the access encroachment, unless “b,” below applies;

b) The access encroachment area for an access driveway/roadway may be increased to 35 percent of the non-constrained area being accessed, if necessary to meet the maximum slope standards listed in Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions;

c) Access roadways/driveways shall provide shared access to the lots/parcels being developed; and

d) The access roadway serving four or more residential lots/parcels, six or more dwelling units, and/or any nonresidential sites shall use the minimum allowed street width with sidewalks on both sides, no landscape strips, and no on-street parking.

2. Development Encroachments -

a) Partially Protected Significant Vegetation, in addition to that already allowed in Chapter 4.12 - Significant Vegetation Protection Provisions;

b) Highly Protected Significant Vegetation;

c) Highly Protected 100-yr. Floodway Fringe areas. However, all such development shall comply with Section 4.5.100 - Standards in Partial Protection Floodway Fringe. See Sections 4.5.20.03, 4.5.90.05, and 4.5.100.03;

d) Proximate Wetlands - Jurisdictional Wetlands associated with Riparian Corridors, including Wetlands not determined to be Locally Significant;

e) Protected Locally Significant Wetlands;

f) Protected Locally Significant Wetlands of Special Concern;

g) Riparian Corridors of the Marys River and the Willamette River;

h) Riparian Corridors of local Streams with a corridor width of 100 ft. from Top-of-bank on each side of the stream, as shown on the Riparian Corridors and Wetlands Map;

i) Riparian Corridors of local Streams with a corridor width of 75 ft. from Top-of-bank on each side of the stream, as shown on the Riparian Corridors and Wetlands Map;

j) Riparian Corridors of local Streams with a corridor width of 50 ft. from Top-of-bank on each side of the stream, as shown on the Riparian Corridors and Wetlands Map;

k) The 25-ft. setback/buffer within Partially Protected Riparian Corridors shown on the Riparian Corridors and Wetlands Map, but not in a manner that conflicts with Section 4.11.50.05.c; and then

l) Areas with existing landslides, consistent with the development standards contained in Chapter 4.~~5~~14 - Landslide~~Natural~~ Hazard and Hillside Development Provisions.

3. Allowance under these provisions for development to encroach into otherwise protected Natural Resources and Natural Hazards does not remove the necessity that development shall comply with all other standards of this Code.

4.11.50.05 – Encroachments into High Risk/Impact Natural Resources and Natural Hazards

a. Some Natural Resources and Natural Hazards present such high risks to life and property, or are of such high importance to the protection of water quality, that encroachments are not appropriate for areas containing these Natural Resources and Natural Hazards, even to provide a Minimum Assured Development Area. Regardless of the area or percentage of a particular lot or parcel covered by the High Risk/Impact Natural Resources and Natural Hazards, no encroachments shall be permitted within them, except as

provided in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazards and Hillside Development~~ Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

b. All development in the Natural Resources and Natural Hazards listed in "c," below, shall be limited to the specific land uses, development requirements, and exceptions listed in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

c. High Risk/Impact Natural Resources -

1. Slopes of 35 percent or greater;

2. Landslide Debris Runout Areas, unless allowed by Section 4.14.60~~4.5.70~~;

3. 0.2-ft. Floodway; and

4. Less than five ft. from the Top-of-bank in Riparian Corridors.

Section 4.11.60 – VARIATIONS

Except as limited by provisions in Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodway~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, variations from development and design standards, such as the standards in this Chapter and in other chapters of this Code addressing parking, landscaping, public improvements, and Pedestrian Oriented Design Standards, may be allowed through the processes outlined in Chapter 2.5 - Planned Development and Chapter 2.12 - Lot Development Option. However, in no case shall an increase in the Minimum Assured Development Area be permitted.

EXCERPT

CHAPTER 4.13

RIPARIAN CORRIDOR AND WETLAND PROVISIONS

Section 4.13.10 - PURPOSES

These provisions are intended to protect and preserve Significant Riparian Corridors and Wetland areas within the City of Corvallis. They are intended to protect open, natural Streams, drainageways, Special Flood Hazard Areas~~Floodplains~~, and Wetlands as integral parts of the City environment. These provisions are also intended to maintain both the hydrological and biological functions of open drainageways, Special Flood Hazard Areas~~Floodplains~~, and Wetland systems in accordance with the Corvallis Stormwater Master Plan; OAR Chapter 660, Division 23, the Administrative Rule that implements Statewide Planning Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources; and other state and federal regulations, including Statewide Planning Goal 6 - Air, Water, and Land Resources Quality. In order to assist in the furtherance of these purposes, where not required, open space tracts are encouraged within areas designated as Natural Resources or Natural Hazards on the Comprehensive Plan and Official Zoning Maps.

a. These provisions are necessary in order to:

1. Manage stormwater drainage;
2. Accommodate increases in runoff volume resulting from urbanization;
3. Moderate increases in peak flows resulting from urbanization;
4. Minimize drainageway and other maintenance costs;
5. Protect properties adjacent to drainageways;
6. Improve surface and groundwater water quality; and
7. Protect Riparian Corridor and Wetland plant and animal habitats.

b. Consistent with the Corvallis Comprehensive Plan, these provisions are also intended to:

1. Minimize harm to natural systems from their use as a stormwater facility;
2. Maintain the Properly Functioning Conditions of Stream and Wetland systems;

3. Preserve hydrological conveyance and storage capacity;

4. Provide for infiltration and groundwater recharge;

5. Allow for natural channel lateral migration and bank failure;

6. Allow for channel widening and other channel modifications that result from changes in hydrology from urban development;

7. Provide proper shading of the Stream to maintain or improve water quality;

8. Allow for a vegetative management strategy that encourages native riparian species;

9. Provide a pollutant filtering zone for surface runoff;

10. Allow for natural Stream processes to minimize Stream channel, bank, and corridor maintenance needs;

11. Buffer urban uses from Stream processes;

12. Provide a source for large woody debris; and

13. Preserve the 0.2-ft. Floodway.

Section 4.13.20 - APPLICABILITY

These provisions apply to Significant Riparian Corridor and Wetland areas, as mapped on the Corvallis Riparian Corridors and Wetlands Map. However, state and federal Wetland and riparian regulations will continue to apply to Wetland and Riparian Corridor areas within the City, regardless of whether or not they are mapped on the Corvallis Riparian Corridors and Wetlands Map. Nothing in these regulations should be interpreted as superceding or nullifying state or federal requirements.

Section 4.13.30 - GREATER RESTRICTIONS

This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and any other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. It is likely that there will be some overlap between the regulations in this Chapter and those in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, which

regulates development in Natural Hazard areas, including the 100-year Floodplain (Special Flood Hazard Area). Where two regulations are in conflict, the most stringent shall govern.

Section 4.13.40 - PROCEDURES

Compliance with the provisions of this Chapter shall be determined through the development review processes identified in Section 1.2.110 of Chapter 1.2 - Legal Framework, through the Building Permit or construction permit review processes, or on a complaint basis through applicable sections of the Municipal Code. Applications for Building Permits or other permits for structures and other development activities on sites containing Significant Riparian Corridors or Wetland areas shall be submitted and reviewed to assure that Riparian Corridors and Wetland areas are appropriately protected before any permits are issued or before improvements, excavation, grading, construction, or development begin.

Application - When development is proposed on a property containing or abutting a Significant Riparian Corridor or Wetland area, an application shall be submitted that accurately indicates the locations of these Natural Resources and the location of any proposed development. The application shall contain a description of the extent to which any Special Flood Hazard Area~~Floodplain~~, Watercourse, or Wetland is proposed to be altered or affected as a result of proposed development and shall include the information in "a," and "b," below.

a. For Properties Adjacent to or Containing Drainageways -

1. Surveyed Site Map - Prepared by a licensed surveyor or civil engineer, depicting two-ft. contour intervals and the location on the subject property of:

   a) All Watercourses such as rivers, Streams, ponds, other drainageways, and natural swales;

   b) Top-of-bank. See Chapter 1.6 - Definitions;

   c) Appropriate Riparian Corridor width(s), as indicated on the City's Riparian Corridors and Wetlands Map. Measured from Top-of-bank and including the Base Riparian Corridor Widths as described in Table 4.13-1 - Base Riparian Corridor Widths, plus any expanded width required to address Riparian-related Areas. Base Riparian Corridor Widths in Table 4.13-1 - Base Riparian Corridor Widths are established by the size of the drainage basin of each portion of a Stream.

1) Riparian-related Areas - Riparian-related Areas are defined as Proximate Wetlands, drainage easements and drainage dedications under the City's jurisdiction; and open space tracts that have been created for Riparian Corridor protection purposes.

2) Base Riparian Corridor Widths - Base Riparian Corridor Widths shall be taken directly from the Riparian Corridors and Wetlands Map and shall be measured from Top-of-bank.

Table 4.13-1 - Base Riparian Corridor Widths Easement Widths are different and are addressed in Section 4.13.70	
Drainage Basin - as established in the Natural Features Inventory and shown on the Riparian Corridors and Wetlands Map	**Base Riparian Corridor Width - Riparian Corridors may be required to be expanded to address Riparian-related Areas**
Less Than 20 Acres	50-ft. Riparian Corridor
20 to 160 Acres	75-ft. Riparian Corridor
More Than 160 Acres	100-ft. Riparian Corridor
Willamette River, Marys River and Their Channels (e.g Boone's Slough)	120-ft. Riparian Corridor
Note: When a Stream segment is inventoried as part of a Wetland, and a Wetland Delineation reduces the dimensions of the Wetland area surrounding the Stream, in no case shall the Riparian Corridor width of that Stream be reduced below the appropriate width stated above.	

d) Appropriate Riparian Easement Width(s), as described in Section 4.13.70.

e) Existing and proposed development, including areas of fill, excavation, Stream or Wetland crossings, altered vegetation, etc.

2. Location of the Stream's 0.2-ft. Floodway, Special Flood Hazard Area~~Floodplain~~, and All Proximate Wetlands, Consistent with the Application Requirements in Sections 4.5.50.02, 4.5.50.03, and 4.5.50.04 - The location of the Floodway and Special Flood Hazard Area~~Floodplain~~ shall be consistent with the mapped areas on the Flood Insurance Rate Map (FIRM), unless the FIRM conflicts with field conditions or does not map the boundary in a specified location, in which case the Floodplain Administrator or

designee~~City Engineer~~ shall make a determination consistent with Sections 4.5.20.01.b, 4.5.50.03.p, 4.5.60.01, and 4.5.60.02~~4.5.50.04~~. The location of Proximate Wetlands may be taken directly from the City's Riparian Corridors and Wetlands Map, or the applicant may provide a Wetland Delineation that has been accepted by the Department of State Lands to precisely locate the Wetland area(s);

3. Topographic lines indicating two-ft. contour levels of both existing and proposed conditions. The existing two-ft. contour levels may be obtained from the City's database, or the applicant may provide a surveyed drawing prepared by a licensed surveyor or civil engineer;

4. Land uses within 100 ft. of the Watercourse edge;

5. Title block, including related development and Stream names, as applicable;

6. North arrow and illustrated scale;

7. Date(s) of field check(s), if any; and

8. Sources of information such as national, state or local soil survey maps; the City's Natural Hazards, Riparian Corridors and Wetlands, Significant Vegetation, Comprehensive Plan, and/or Official Zoning Maps; date and scale of aerial photos, etc.

b. For properties containing Wetlands, as indicated on the Corvallis Local Wetland Inventory Map - The submittal materials listed below are required. Additionally, all applications will be reviewed to determine that all necessary permits have been obtained or will be obtained from those federal, state, or local governmental agencies that require prior approval.

1. Site Plan - A site plan that graphically depicts:

   a) All Wetland boundaries, as indicated on the Corvallis Local Wetland Inventory Map;

   b) A 25-ft. setback/buffer around the upland edge of locally and non-locally protected Wetlands, as mapped on the City's Local Wetland

Inventory Map[1]. Proximate Wetlands shall not be included when determining this 25-ft. setback/buffer location; and

c) A Wetland Delineation of the boundaries of the Wetland area, with an accompanying site map, that has been accepted and approved by the Department of State Lands (DSL) may be substituted for the information in "b," above;

2. Wetland Site Plan and Aerial Photo - A Wetland site plan and aerial photo with all Wetland boundaries identified, as indicated on the Corvallis Local Wetland Inventory Map, and distinguished to show the locally protected Wetlands, non-locally protected Wetlands, and Proximate Wetlands;

3. Location of existing and proposed development, including areas of fill, excavation, Stream or Wetland crossings, altered vegetation, etc.;

4. Topographic lines indicating two-ft. contour levels of both existing and proposed conditions. The existing two-ft. contour levels may be obtained from the City's database, or the applicant may provide a surveyed drawing prepared by a licensed surveyor or civil engineer;

5. Land uses within 100 ft. of the Wetland edge;

6. Title block, including related development and Stream names, as applicable;

7. North arrow and illustrated scale;

8. Date(s) of field check(s), if any;

9. Sources of information such as national, state or local soil survey maps; the City's Natural Hazards, Riparian Corridors and Wetlands, Significant Vegetation , Comprehensive Plan, and/or Official Zoning Maps; date and scale of aerial photos, etc.; and

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1 Local Wetland Inventories are considered to provide a level of accuracy of within 25 ft. for identification of the Wetland-upland interface. Consequently, the 25-ft setback/buffer identified in Section 4.13.40.b.1.b is intended to ensure that significant Wetlands are protected consistent with the requirements of OAR 660, Division 23 prior to the receipt of a Department of State Lands (DSL) approved Wetland Delineation. For development review purposes, a property owner may propose development within this setback/buffer, and approval may be granted, contingent upon receipt by the City of an approved Wetland Delineation indicating that the proposed development is outside of lands determined to be Wetlands by the Department of State Lands. In such cases, no development permits shall be issued prior to receipt of said Wetland Delineation.

10. Wetland mitigation sites approved by DSL or proposed for approval by DSL, as applicable.

Section 4.13.50 - USE LIMITATIONS AND EXCEPTIONS WITHIN HIGHLY PROTECTED RIPARIAN CORRIDORS AND RIPARIAN-RELATED AREAS

Highly Protected Riparian Corridors are those which have been identified as warranting a high level of protection due to their environmental importance and Natural Resource quality. Riparian-related Areas are defined as Proximate Wetlands, drainage easements and drainage dedications under the City's jurisdiction, and open space tracts that have been created for Riparian Corridor protection purposes. Additionally, The Special Flood Hazard Area~~100-year Floodplain area~~ serves an important Riparian Function. This area is mapped on the City's Natural Hazards Map, and is subject to the protections outlined in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within Highly Protected Riparian Corridors and Riparian-related Areas, as mapped on the City's Riparian Corridors and Wetlands Map.

a. Removal of Vegetation - Removal of vegetation from Riparian Corridors and Riparian-related Areas is prohibited, except for the following purposes:

1. Stream restoration and enhancement programs;

2. Removal of Non-native, Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary, in conjunction with vegetation removal non-rip-rap erosion control measures shall be utilized;

3. Substitution of local source native plant species for non-native plants. Such local source native plant species shall originate from stock collected from wild plants within 75 miles of planting site;

4. Development of Water-related or Water-dependent Uses as defined in Chapter 1.6 - Definitions, provided such Uses are designed and constructed to minimize impact on existing Riparian Vegetation;

5. Removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage;

6. Perimeter mowing/cutting of vegetation for fire hazard prevention/fuel reduction, provided such mowing/cutting occurs no more than 20 ft. around structures;

7. Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations, as well as the restrictions set forth in the Corvallis Municipal Code.

8. Maintenance and protection of the function of City utilities and transportation facilities located within Riparian Corridors and Wetlands;

9. Allowance of activities under an Oregon Department of Fish and Wildlife-approved restoration plan for improving Riparian Function. As a component of this plan, and as a means of controlling the spread of the weeds throughout the Watershed, livestock may be permitted in areas with identified Non-native, Invasive, and/or Noxious Vegetation; and

10. Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List.

b. **Building, Paving, and Grading Activities** - The placement of structures or impervious surfaces, as well as grading, excavation, and the placement of fill, are prohibited. Exceptions to the drainageway restrictions may be made for the purposes identified in items 1-7 of this Section, provided they are designed and constructed to minimize adverse impacts to Riparian Corridors and Riparian-related Areas.

1. Replacement or Relocation of Existing Buildings - Replacement or relocation of existing buildings, either within the building's original footprint, or with the same or reduced square footage area elsewhere on the site. A relocation of an existing building within the same square footage area, but located elsewhere on the site, is only allowed if the relocation of the building enhances Riparian, Stormwater, and Floodplain Functions. Under no circumstances shall a relocated building be located within 15 ft. of Top-of-bank. The relocation shall be considered to enhance Stormwater, and

Floodplain Function if it furthers any of the following goals without worsening any other goal:

a) Replaces standard construction with Flow-through Design construction, if the building is within the 100-year Floodplain (Special Flood Hazard Area);

b) Moves the structure to a higher elevation;

c) Moves the structure further from the Top-of-bank of the adjacent water body;

d) Reduces the amount of impervious surface area in the Riparian Corridor; and

e) Does not negatively impact non-noxious Riparian Vegetation. Non-native, Invasive, and/or Noxious Vegetation is defined in Chapter 1.6 - Definitions.

2. The location and construction of streets, utilities, bridges, bicycle, and pedestrian facilities within Highly Protected Riparian Corridors and Riparian-related Areas must be deemed necessary to maintain a functional system by the City Engineer. This Code, City Transportation and Utility Master Plans, and other adopted City plans shall guide this determination. The design standards of Chapter 4.0 - Improvements Required with Development shall be applied to minimize the impact to the subject area;

3. Redevelopment of utility operations existing as of December 31, 2004, is also permitted. Required riparian easement areas shall be re-vegetated consistent with Section 4.13.50.d.1 and Section 4.13.50.d.2;

4. Development of Water-related and Water-dependent Uses, as defined in Chapter 1.6 - Definitions, where no other viable locations exist;

5. Erosion control or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers, or other state or federal regulatory agency with jurisdiction in this area. Erosion control or flood control measures shall either utilize bio-engineering methods other than rip-rap, or shall utilize rip-rap only to address an imminent hazard to a structure built prior to December 31, 2004. If utilized, the rip-rap installation shall be designed by a Professional Engineer

Licensed by the State of Oregon and approved by the Oregon Department of Fish and Wildlife;

6. Development associated with the Minimum Assured Development Area that would be allowed in accordance with Chapter 4.11 - Minimum Assured Development Area (MADA); and

7. Water quality or detention facilities located outside of riparian easement areas, as determined in Section 4.13.70.

c. Residential Setback Reduction -

1. When development is occurring pursuant to the provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), the following setback reductions are allowed for properties with Low Density Residential zoning and containing Highly Protected Riparian Corridors. The setback reductions shall apply to:

   a) Redevelopment in which all structures are removed from the Riparian Corridor area; and

   b) New development on vacant properties in which no structures are placed within the Riparian Corridor area.

2. Under the circumstances in "1," above, front and side yard setbacks may be reduced as shown in "a," through "c," below. However, the setback for front-loading garages shall remain at 19 ft.

   a) 10 ft. for the front yard;

   b) five ft. for an interior side yard; and

   c) 10 ft. for an exterior side yard.

d. Re-vegetation of Streambanks - Commensurate with the extent of new development of structures or of impervious surface areas on development sites containing Stream or river frontage as shown on the City's Riparian Corridors and Wetlands Map, the re-vegetation of Stream banks is required.

For each 500 sq. ft. of new structure area or impervious surface area, 100 lineal ft. of the development site's Stream frontage shall be re-vegetated according to the following standards, up to the total amount of the development site's Stream frontage:

1. Stream bank vegetation, as outlined in "2," below, shall be provided within the first 30 ft. from Top-of-bank, with the exception of the Willamette River, which shall be addressed as indicated in "3," below;

2. Re-vegetation Standards -

   a) Streams that already have existing vegetation as outlined in this provision are considered to be compliant with these Stream shading standards. To be considered compliant, at minimum the vegetation within the first 30 ft. from the Top-of-bank, as described in "1" above, shall include:

      1) An existing vegetated tree canopy consisting of healthy trees at least four in. caliper, measured at four ft. above Natural Grade, and located at an average spacing of 20 ft. along the Stream bank; and

      2) An existing vegetated under story consisting of healthy riparian shrubs over at least 50 percent of the area; and healthy groundcover such that the combination of shrubs and groundcover results in a coverage over at least 90 percent of the area.

   b) Streams that do not have the required existing vegetated tree canopy and existing vegetated under story in the area to be shaded are subject to re-vegetation. Such re-vegetation shall either be that required by an Oregon Department of Fish and Wildlife-approved restoration plan for improving Riparian Function, or that required by the provisions outlined below:

      1) In areas that do not meet the tree canopy requirement outlined in "a" above, large-canopy riparian trees, such as Acer Macrophyllum, with a minimum caliper size of 3/4 -1 in. shall be planted in a triple row with staggered spacing of 20 ft. on-center along the length of the Stream bank. All new trees are required to be mulched with four cubic ft. of bark chips and drip irrigated for a period of five years to ensure establishment. All

new trees shall be staked and protected by rodent-proof fencing, as specified by the Public Works Department;

2) In areas that do not meet the riparian shrub coverage portion of the under story requirement outlined in "a," above, riparian shrubs shall be planted and maintained to provide the required 50 percent coverage within five years. The minimum planting size for the riparian shrubs shall be one gallon or 18 in. live stakes. All new shrubs shall be mulched with three in. of bark chips, extending one ft. from the drip line of the shrub or around the live stake or live stake bundle. All new shrubs shall also be irrigated and maintained for a period of five years to ensure establishment.

3) In areas that do not meet the groundcover coverage portion of the under story requirement outlined in "a," above, groundcover shall be maintained or planted to provide a minimum of 90 percent total coverage of shrubs and ground covers within five years. The minimum planting size shall be one gallon. Ground covers shall be mulched with three in. of bark chips and irrigated for a period of five years to ensure establishment.

3. For properties along the Willamette River, any re-vegetation within the Willamette River Greenway (WRG) shall be determined through the WRG Conditional Development review process and shall be based upon the procedures and criteria contained in Chapter 2.3 - Conditional Development and Chapter 3.30 - Willamette River Greenway (WRG) Overlay. However, for Riparian Corridor areas of the Willamette River Greenway that are subject to the provisions of this Chapter, and are preserved as part of the Conditional Development process, such preserved portions of Riparian Corridors shall be subject to the re-vegetation standards contained in section "2.b," above.

e. Subdivisions, Land Partitions, and Property Line Adjustments - For properties with Natural Resources or Natural Hazards subject to Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Subdivision, Partition, or Lot Line Adjustment shall create new lots or parcels unless:

1. Each new and remaining lot or parcel contains an area unconstrained by Natural Resources or Natural Hazards; and

2. The unconstrained area in “1,” above, is equal to or greater than the Minimum Assured Development Area for the zone or zones in which the development site falls.

Exceptions to this requirement are lots created for public park purposes and privately- or publicly-owned lots completely contained within land zoned Conservation-Open Space. New Subdivisions and Partitions may contain common open space tracts for the purpose of protecting Natural Resources and/or avoiding Natural Hazards.

f. **Maintenance** - The limitations imposed by this Section do not preclude the routine maintenance of structures and landscaped areas.

1. Maintenance of lawns, non-native riparian planted vegetation and landscaping shall not expand lawn areas or remove or damage any non-hazardous tree. A lawn area is defined as a vegetated area mowed to 18 in. or less in height.

2. The application of herbicides or other pesticides, and the application of fertilizers are subject to applicable state and federal regulations; and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code.

3. Where replanting is done, vegetation shall be replanted with native species or approved alternatives, with the exception of continued Agricultural Uses, as specified in Section 4.13.50.a.7.

4. Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree’s health, longevity, and resource functions.

5. Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species.

6. Disposal of yard waste or other organic materials, with the exception of downed trees, leaf litter from Riparian Vegetation, and mulch for allowed riparian plantings, is:

   a) Prohibited within Highly Protected Riparian Corridors;

   b) Prohibited within 25 ft. of the Top-of-bank within Partially Protected Riparian Corridors; and

   c) Regulated by restrictions in the Corvallis Municipal Code.

g. **Exemptions** - When performed under the direction of the City, and in compliance with the provisions of the Stormwater Master Plan, the following activities shall be exempt from the provisions of this Chapter:

1. Response to public emergencies, including emergency repairs to public facilities; and

2. Routine maintenance or replacement of existing public facilities.

Section 4.13.60 - USE LIMITATIONS AND EXCEPTIONS WITHIN PARTIALLY PROTECTED RIPARIAN CORRIDORS

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within Partially Protected Riparian Corridors, as mapped on the City's Riparian Corridors and Wetlands Map. Unless noted otherwise, the regulations shall apply within 25 ft. of the Top-of-bank of the identified riparian feature:

a. **Removal of Vegetation** - Removal of vegetation from Riparian Corridors is prohibited, except for the purposes outlined in Section 4.13.50.a.

b. **Building, Paving, and Grading Activities** - The placement of structures or impervious surfaces, and grading, excavation, and the placement of fill, are prohibited except as stated below. Exceptions to these restrictions may be made for the purposes identified in items 1-2 of this section, provided they are designed and constructed to minimize adverse impacts to the Riparian Corridor area.

1. <u>Replacement or Relocation of Existing Buildings</u> - Replacement or relocation of existing buildings, either within the building's original footprint, or with the same or reduced square footage area elsewhere on the site. A relocation of an existing building within the same square footage area, but located elsewhere on the site, is only allowed if the relocation of the building

enhances Stormwater, and Floodplain Functions. Under no circumstances shall a relocated building be located within 15 ft. of Top-of-bank.

Alterations of structures along the Willamette River may be subject to the Willamette River Greenway Conditional Development Permit requirements in Chapter 2.3 - Conditional Development and Chapter 3.30 - Willamette River Greenway (WRG) Overlay.

The relocation shall be considered to enhance Stormwater, and Floodplain Function if it furthers any of the following goals without worsening any other goal:

a) Replaces standard construction with Flow-through Design construction, if the building is within the 100-year Floodplain (Special Flood Hazard Area);

b) Moves the structure to a higher elevation;

c) Moves the structure further from the Top-of-bank of the adjacent water body;

d) Reduces the amount of impervious surface area in the Riparian Corridor; and

e) Does not negatively impact non-noxious Riparian Vegetation. Non-native, Invasive, and/or Noxious Vegetation is defined in Chapter 1.6 - Definitions.

2. Exceptions as outlined in sections 4.13.50.b.2 through 4.13.50.b.7.

c. Residential Setback Reduction -

1. The following setback reductions are allowed for property zoned Low Density Residential and containing Partially Protected Riparian Corridors. The setback reductions shall apply to:

a) Redevelopment in which all structures are removed from the 25-ft. setback/buffer area; and

b) New development on vacant properties in which no structures are placed within the 25-ft. buffer area.

2. Under the circumstances in “1,” above, setbacks may be reduced as outlined in “a,” through “c,” below. However, the setback for front-loading garages shall remain at 19 ft.

a) 10 ft. for front and side yard setbacks;

b) Five ft. for an interior side yard; and

c) 10 ft. for an exterior side yard.

d. Re-vegetation of Streambanks - Re-vegetation of streambanks shall be as outlined in Section 4.13.50.d, except that streambank vegetation is required within the first 25 ft. from the Top-of-bank, instead of the first 30 ft.

e. Compliance with Some Use Limitations and Exceptions for Highly Protected Riparian Corridors and Riparian-related Areas - Compliance is required with sections 4.13.50.e through 4.13.50.g of Section 4.13.50 - Use Limitations and Exceptions for Highly Protected Riparian Corridors and Riparian-related Areas.

Section 4.13.70 - DRAINAGEWAY TRACTS, EASEMENTS, AND DEDICATIONS

Section 4.13.70.01 - Overview

a. Impacts of Development - Development can have a number of impacts on the drainage system and its associated water quality. These potential impacts include, but are not limited to:

1. Increases in the amount and velocity of surface water runoff;

2. Decreases in the time for stormwater destined for drainageways to reach peak flow;

3. Increases in the frequency and velocity of floods;

4. Channel incision and widening;

5. Increases in water temperature; and

6. Increases in the quantity and types of pollutants that may enter drainageways.

b. Minimizing Impacts of Development -

1. The drainageways within the City are intended to function as a wholistic natural system that includes both Fish-bearing Streams and other Streams whose flow is recognized to have direct impacts on these Fish-bearing Streams. The City intends to manage stormwater from development in a manner that maintains or improves the Properly Functioning Conditions of the Streams utilized for stormwater discharge.

2. Requiring of Easements -

   a) Reasons for Requiring Easements -

      1) To ensure that negative impacts to the system in "a," above, are minimized;

      2) To accommodate and maintain the natural hydrological functions and processes; and

      3) To provide and maintain adequate stormwater facilities.

   b) When the Granting of an Easements is Required -

      1) For new development, expansion of existing development, or redevelopment proposed on land abutting or containing an open, natural drainageway.

      2) The granting of this easement shall be under the conditions described in Section 4.13.70.02, below, over lands suitable for conveying storm waters and for maintaining and operating an effective open drainageway system.

3. The easement required by "2," above, is intended to satisfy the purposes cited in Section 4.13.10, as well as the stormwater management purposes identified in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions; and shall be reviewed and approved by the City Engineer or Floodplain Administrator or designee, as appropriate.

Section 4.13.70.02 - Easements, Easement Restrictions, Dedications, and Easement Widths

a. Easement - An easement shall be required when:

1. Development is proposed on a vacant parcel or a partially developed parcel, and the amount of impervious surface on the parcel resulting from new development and/or redevelopment occurring after December 31, 2004, would cumulatively equal or exceed 20 percent of the total area of the parcel. The effects of new development and/or redevelopment shall be cumulative from December 31, 2004, and when the net effect of one or more changes results in 20 percent impervious coverage or more, an easement shall be required; or

2. A parcel of land is divided into two or more parcels, whether by Land Partition or Subdivision.

b. Easement Restrictions - The easement shall contain sufficient restrictions on the use of the area to satisfy the purposes cited in Section 4.13.10 above. Restrictions shall apply to structural improvements, regrading, filling, and alteration of existing vegetative cover, as specified on an easement document provided by the City Engineer. Trees that fall within riparian easement areas are not to be removed, unless they are a hazard, or unless they would create flooding that would cause structural damage.

c. Dedications - The City will strongly consider accepting voluntary drainageway dedications provided:

1. Public maintenance of the drainageway is anticipated or public ownership will enhance protection of the resource or maintenance of Stormwater Functions;

2. Dedication of the drainageway area does not create substandard lot size, substandard building setbacks, or otherwise reduce applicable development standards to the point that would render the existing development Nonconforming;

3. The methodologies for determining width described in subsection “d,” are utilized; and

4. The land to be dedicated is placed in a separate tract through the Land Division process.

d. **Easement Widths** - When an easement is required, the appropriate width shall be as described in "1," through "5," below. However, in no case shall riparian easements include areas containing existing buildings that are intended to remain, nor shall easements include development area assured under "4," below.

For areas with Riparian Corridors, as designated on the City's Riparian Corridors and Wetlands Map, the associated easement width and requirements shall be as follows:

1. Measurement and Separate Tract - Easement areas shall be measured from Top-of-bank, as indicated from a submitted topographic survey, and shall be placed in a separate tract.

2. Easement Width - When an easement is required, the appropriate width shall be as outlined in Table 4.13-2 - Easement Width, except as modified by the provisions in "3," through "5," below.

Table 4.13-2
Easement Width

Riparian Corridor Areas Mapped on the Riparian Corridors and Wetlands Map	Required Easement Area --To be Placed in Separate Tracts
All Partially Protected Stream Corridors	Drainage channel + 25 ft. from Top-of-bank; or The boundary of the 0.2-ft. Floodway, whichever is greater[2]
Highly Protected Riparian Corridors along the Willamette and Mary's Rivers	Drainage channel + 75 ft. from Top-of-bank; or The boundary of the 0.2- ft. Floodway, whichever is greater[2]
All other Highly Protected Riparian Corridors	Drainage channel + 50 ft. from Top-of-bank; or The boundary of the 0.2-ft. Floodway, whichever is greater[2]

2

Exceptions for select existing structures located between the 1.0-ft. Floodway and the 0.2-ft. Floodway are outlined in Chapters 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

Note: The area between the outer edge of the easement boundary and the outer edge of the Riparian Corridor is regulated by sections 4.13.50 and 4.13.60.

3. If the 0.2-ft Floodway boundary, as determined by maps on file with the Floodplain Administrator or designee~~City Engineer~~, ext ends beyond the required width as specified in "2," above, additional easement width shall be provided as needed to encompass the Floodway.

4. If, through the provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), it is determined that encroachment into a Riparian Corridor area is necessary to allow for utilization of the Minimum Assured Development Area, any associated easement requirement shall be relaxed to the extent necessary to allow for the minimum necessary encroachment into the resource area.

5. Easement widths wider than required in "2," above, may be accepted to cover the full Riparian Corridor, as determined per Section 4.13.40.a.1.

Section 4.13.80 - STANDARDS FOR PROPERTIES WITH WETLANDS

a. The City's Riparian Corridors and Wetlands Map identifies two types of Wetlands within the City -

1. Locally Protected Wetlands; and

2. Non-locally Protected Wetlands.

b. All Wetlands are identified in the City's adopted Local Wetlands Inventory Map. The Inventory includes all Wetlands within the Urban Growth Boundary that are at least 0.5 ac. in size, whether isolated, within Riparian Assessment Areas, or within wildlife habitat assessment areas.

c. The methodology for identifying the Wetlands was taken from the Oregon Department of State Lands' (DSL) Administrative Rules. The Oregon Freshwater Assessment Methodology (OFWAM) was utilized to assess whether or not a Wetland met the state criteria for a Locally Significant Wetland (LSW). Once a list of Locally Significant Wetlands is identified, a local jurisdiction is able to apply additional local regulations to those LSWs, if it is deemed appropriate.

d. The City Council determined that a number of the identified LSWs should be locally protected. The identified Locally Protected Wetlands (LPW), on the City's Riparian Corridors and Wetlands Map, represent the Wetlands which are to receive local protection. The Locally Protected Wetlands consist of:

1. Locally Significant Wetlands of Special Concern; and

2. Locally Protected Locally-significant Wetlands.

e. The Locally Significant Wetlands of Special Concern are Wetlands that are especially worthy of protection due to Oregon Freshwater Assessment Methodology (OFWAM) factors such as the presence of known habitat for rare, threatened, and endangered species. Non-locally Protected Wetlands are mapped on the City's Local Wetlands Inventory Map, but are not subject to local regulations beyond state and federal requirements.

4.13.80.01 - Use Limitations and Exceptions Within Locally Protected Wetlands

a. In addition to the requirements of the underlying zone, the limitations and exceptions in "b," through "e," below, shall apply to -

1. Activities within Locally Protected Wetlands (LPWs) as shown on the City's Riparian Corridors and Wetlands Map; and

2. The associated 25-ft. setback/buffer area described in Section 4.13.40.b.1.b, unless a delineation results in a different boundary.

b. Removal of Vegetation - Removal of vegetation from Locally Protected Wetlands is prohibited, except for the following purposes:

1. Wetland restoration and enhancement programs approved by the Department of State Lands; and

2. Activities outlined in sections 4.13.50.a.2, 4.13.50.a.3, 4.13.50.a.5 through 4.13.50.a.8, and 4.13.50.a.10.

c. **Building, Paving, and Grading Activities** - Within LPW areas, the placement of structures or impervious surfaces, as well as grading, excavation, and the placement of fill, is prohibited, except as outlined below. Exceptions to the LPW restrictions may be made for the purposes identified

in “1,” and “2,” below, provided they are designed and constructed to minimize adverse impacts to Wetland Functions.

1. Replacement of existing buildings with buildings located within the original building footprint, provided replacement does not disturb additional surface area within the Wetland area. Vertical additions may be added to these structures if they do not disturb additional surface area within the Wetland area.

2. Activities outlined in sections 4.13.50.b.2, 4.13.50.b.5, and 4.13.50.b.6.

d. Compliance with Some Use Limitations and Exceptions for Highly Protected Riparian Corridors and Riparian-related Areas - Compliance is required with sections 4.13.50.e through 4.13.50.g of Section 4.13.50 - Use Limitations and Exceptions for Highly Protected Riparian Corridors and Riparian-related Areas.

e. Department of State Lands and US Army Corps of Engineers Notification Required - In addition to the restrictions and requirements of this Section, all proposed development activities within any Wetland are also subject to Oregon Department of State Lands (DSL) and US Army Corps of Engineers standards and approval. Where there is a difference, the more restrictive regulation shall apply. In accordance with ORS 227.350, as amended, the applicant shall be responsible for notifying DSL and the Corps of Engineers whenever any portion of any Wetland is proposed for development.

No application for development will be accepted as complete until documentation of such notification is provided. Additionally, no site development permits, such as Grading and Excavation Permits, Public Improvements by Private Contract Permits (PIPC), and Building Permits, shall be issued until the City has received verification of DSL and Corps of Engineers approval for development on the subject site.

4.13.80.02 - Procedures for Non-locally Protected Wetlands

Department of State Lands and US Army Corps of Engineers Notification Required - In addition to the restrictions and requirements of this Section, all proposed development activities within any Wetland are also subject to Oregon Department of State Lands (DSL) and US Army Corps of Engineers standards and approval. Where there is a difference, the more restrictive regulation shall apply. In

accordance with ORS 227.350, as amended, the applicant shall be responsible for notifying DSL and the Corps of Engineers whenever any portion of any Wetland is proposed for development.

No application for development will be accepted as complete until documentation of such notification is provided, and no site development permits, such as Grading and Excavation Permits, Public Improvements by Private Contract Permits (PIPC), and Building Permits, shall be issued until the City has received verification of DSL and Corps of Engineers approval for development on the subject site. Non-locally Protected Wetlands are shown on the City's Local Wetlands Inventory Map.

4.13.90 - MAP REFINEMENTS

4.13.90.01 - Map Refinements Defined - Map Refinements are adjustments made through professional analyses to refine the actual boundaries of some Natural Resources and Natural Hazards. Map Refinements must be made in accordance with the provisions in Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.~~, and~~ The Map Refinements governed by this chapter are specifically allowed to determine the location and extent of the:

~~**a.** 0.2-ft. Floodway;~~

~~**b.** 1.0-ft. Floodway, in accordance with FEMA regulations;~~

~~**c.** 100-year Floodway Fringe, in accordance with FEMA regulations;~~

~~**d.** Landslide Hazard areas;~~

~~**e.** Slopes;~~

a~~f~~. Top-of-bank of Streams and rivers;

b~~g~~. Riparian Corridors, once Top-of-bank is accurately determined; and

c~~h~~. Wetlands, through delineations approved by the Oregon Department of State Lands.

4.13.90.02 - Map Refinements Provisions -

Map Refinement provisions for Top-of-bank, and Riparian Corridor and wetland boundaries are outlined below. Map Refinement provisions for the 0.2-foot Floodway, the 1.0-ft. Floodway, and the 100-year Floodplain~~Floodway Fringe~~ are outlined in Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions. Map Refinement provisions for Landslide Hazard areas and slopes are outlined in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Map Refinements are also adjustments to resolve registration issues that may occur between different GIS layers or maps.

a. **Top-of-bank and Riparian Corridor Boundaries** - Riparian Corridor Boundaries and widths are as noted on the Riparian Corridors and Wetlands Map. They are measured with respect to Top-of-bank. The precise Top-of-bank is determined in the field by a licensed civil engineer. The civil engineer determines the location of Top-of-bank using two-ft. contour intervals and using the methodology cited in the definition for Top-of-bank in Chapter 1.6 - Definitions. The two-ft. contour intervals must be surveyed by a licensed surveyor or civil engineer. The outer bounds of the Riparian Corridors is determined by measuring from the precise location of Top-of-bank, using the widths specified on the Riparian Corridors and Wetlands Map. The boundaries must then be surveyed by a licensed surveyor or civil engineer and mapped using two-ft. contours.

b. **Wetland Boundaries** - Wetland boundaries must be determined by one of the following two methods:

1. Using the Corvallis Local Wetland Inventory Map, in which case a 25-ft. setback/buffer must be added to the upland edge of the wetland; or

2. Using an established and unexpired wetland delineation accepted and approved by the Department of State Lands (DSL), in which case, no setback/buffer is required from the upland edge of the wetland.

4.13.90.03 - Map Refinement Procedures -

Adjustments to maps consistent with the provisions of Section 4.13.90.01 and Section 4.13.90.02, above, are considered to be Map Refinements and may be Ministerially adjusted on the relevant maps, with no land use process required other than a demonstrated adherence to the provisions of Section 4.13.90.01 and Section 4.13.90.02.

4.13.100 - MAP CORRECTIONS

No Zone Change or Comprehensive Plan Map Amendment shall be required to accomplish Map Corrections approved in accordance with the provisions outlined in this Section.

a. Decisions regarding Map Correction requests shall be made by the Community Development Director, as specified in Section 4.13.100.01 and Section 4.13.100.02, below. Upon approval of a Map Correction request, the Director shall ensure that changes are reflected in the City's affected maps and databases. Notice of such Map Correction shall be provided to decision-makers as outlined in Section 4.13.100.b, below

b. When requests for five Map Corrections on any Natural Hazard or Natural Resource for which a Map Correction is allowed have been submitted to and decided upon by the Community Development Department Director, or approximately twice a year, whichever is sooner, the Map Correction requests shall be summarized in an informational memo for decision-makers so that they may review them for tracking purposes in accordance with Comprehensive Plan Policy 4.2.6. This memo shall be shared with the Corvallis Planning Commission and City Council for Map Correction requests on lands within the City limits; and with the Corvallis and Benton County Planning Commissions, the Corvallis City Council, and the Benton County Board of Commissioners for Map Correction requests on lands within the Urban Fringe.

4.13.100.01 - Map Corrections Defined

A Map Correction is not the type of adjustment described in the Map Refinement provisions of Section 4.13.90 above. A Map Correction is, however, an actual correction to maps referencing Natural Hazards or Natural Resources other than Significant Vegetation areas, where it is found that the map depiction does not reflect the Natural Features Inventory. As the Natural Features Inventory (NFI) was the basis for developing the City's maps that reference Natural Hazards and Natural Resources, a correction to the NFI for Natural Hazards or Natural Resources other than Significant Vegetation areas could result in a correction to the related maps. These maps include the Comprehensive Plan Map, Local Wetlands Inventory Map, Official Zoning Map, Natural Hazards Map, or Riparian Corridors and Wetlands Map.

Map Correction provisions for Riparian Corridor widths and Wetland boundaries are outlined below. Map Correction provisions for the 100-year Floodplain ~~and Landslide Hazards~~ are outlined in Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions. Map Correction provisions for Landslide Hazard

Areas are outlined in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

a. **Riparian Corridor Widths** - Riparian Corridor boundaries may be refined through the Map Refinement procedures outlined in Section 4.13.90, above. Riparian Corridor widths used to determine the boundaries were developed using information from the Natural Features Inventory regarding the amount of acres drained within specified areas, and then appropriate corridor widths were applied to the Riparian Corridors and Wetlands Map. The relationship between the areas drained and the different Riparian Corridor widths is contained in Table 4.13-1 - Base Riparian Corridor Widths. If an error is discovered in the mapping portrayal of the information contained within the Natural Features Inventory, a Mapping Correction may be requested.

b. **Wetland Boundaries** - Wetland boundaries may be refined through the Map Refinement procedures outlined in Section 4.13.90, above. However, if it can be scientifically demonstrated that an error exists in the translation of the Natural Features Inventory Information to the associated City Maps, then a Mapping Correction may be requested.

4.13.100.02 - Map Corrections Procedures -

a. **Riparian Corridor Widths** - Map Correction requests to Riparian Corridor widths indicated by the mapping portrayal of the information contained within the Natural Features Inventory shall be accomplished as outlined in this Section.

If a property owner or property owner's legal representative provides the Community Development Department Director with the items listed in "1," below, a request to revise the Riparian Corridor width indicated on the Riparian Corridors and Wetland Map and other affected maps may be considered as outlined in "2," and "3," below.

1. Documents identifying the specific reach of Riparian Corridor in question, and the specific information in the Natural Features Inventory that the property owner believes has not been accurately translated to the Riparian Corridors and Wetlands Map and related other City maps.

2. If review of the items in "1," above indicate that a mapping error has occurred, then the Director shall ensure that the appropriate changes

are made to correct the Riparian Corridors and Wetlands Map and other affected maps and databases.

3. To approve a Map Correction request, the Director must find that the Natural Features Inventory contains information for the specific Riparian Corridor reach in question that is different from that indicated by the Riparian Corridor Width on the Riparian Corridor and Wetlands Map. The appropriate Riparian Corridor widths are as noted in Table 4.13-1 - Base Riparian Corridor Widths.

b. Wetland Boundaries - Map Correction requests for Wetland boundaries indicated on the Riparian Corridors and Wetlands Map and other affected maps shall be accomplished as outlined in this Section.

If a property owner or property owner's legal representative provides the Community Development Department Director with the items listed in "1," below, a request to revise the Wetland boundaries indicated on the Riparian Corridors and Wetland Map and other affected maps may be considered as outlined in "2," and "3," below.

1. Documents that identify information contained within the Natural Features Inventory and an explanation of how the property owner believes that the information has not been accurately translated to the Riparian Corridor and Wetlands Map and other City maps. The documents shall identify the specific wetland in question and demonstrate that an error exists.

2. If review of the items in "1," above, indicate that a mapping error has occurred, then the Director shall ensure that the appropriate changes are made to correct the Riparian Corridors and Wetlands Map and other affected maps and databases.

3. To approve a Map Correction request, the Director must find that an error exists in the translation of the Natural Features Inventory Information to the associated City Maps.

NEW LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS CHAPTER. THESE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS WERE IMPORTED FROM THE CURRENT CHAPTER 4.5 WHICH IS CHANGING FROM "NATURAL HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS" TO "FLOODPLAIN PROVISIONS." THE DOUBLE UNDERLINE AND ~~STRIKE-OUT~~ FONTS USED BELOW INDICATE THE CHANGES FROM THE CURRENT CHAPTER 4.5.

CHAPTER ~~4.5~~4.14
~~NATURAL HAZARD AND~~ LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS

Section 4.514.10 - PURPOSES - ~~NATURAL HAZARD AND~~ LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS

Without establishing any priority, the purposes of this Chapter are intended to:

a. Protect human life, health, and property~~Reduce flood damage and loss of life in areas subject to periodic flooding~~;

b. Reduce damage and loss of life from ~~other~~ the Natural Hazards~~, including~~ of steep slopes, landslide risk areas, and landslide-related risk areas;

c. Implement the landslide hazard and hillside development requirements of Statewide Planning Goal 7 - which relates to Areas Subject to Natural Disasters and Hazards;

d. Implement the landslide hazard and hillside provisions in Article 4 of the Comprehensive Plan; and

~~**d.** Implement some of the land use aspects of the City's Stormwater Master Plan, as well as some aspects of the City's Endangered Species Act Salmon Response Plan;~~

~~**e.** Through Floodplain regulation, contribute to the Properly Functioning Condition of Streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;~~

~~**f**. Manage stormwater drainage in a manner that:~~

~~1. Maintains the Properly Functioning Conditions of Streams;~~

~~2. Provides for the conveyance and temporary storage of floodwater;~~

~~3. Reduces floodwater velocity;~~

~~4. Facilitates sediment deposition in the Floodplain;~~

~~5. Provides an opportunity for groundwater recharge; and~~

~~6. Promotes other Stormwater and Floodplain functions.~~

~~These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other Natural Hazard areas;~~

~~**g**. Implement requirements for the City's participation in the National Flood Insurance Program, including the Community Rating System;~~.

e. In order to assist in the furtherance of these purposes, where not required, creation of open space tracts is encouraged within areas designated as Natural Resources or Natural Hazards on the Comprehensive Plan and Official Zoning Maps.

Section 4.~~5~~14.20 - APPLICABILITY

4.~~5~~14.20.01 - ~~Which~~ Natural Hazards that are Subject to this Chapter -

a. These provisions apply to:

~~1. Public and private properties in the 100-year Floodplain of rivers and local Streams;~~

~~2~~1. Areas with slopes equal to or greater than 10 percent;

~~3~~2. High landslide risk areas;

~~4~~3. Existing landslide areas; and

~~5~~4. Landslide debris run-out areas.

b. Mapping of Natural Hazards -

1. Natural Hazards Map - The Natural Hazard areas in "a," above, are mapped on the Corvallis Natural Hazards Map.

~~The Flood Insurance Study for the City of Corvallis, dated July 2, 1984, and any revisions thereto, with accompanying Flood Insurance~~

~~Rate Maps (FIRM) and Flood Boundary & Floodway Maps of Corvallis, Oregon, dated January 3, 1985, and any revisions thereto, are the basis for establishing areas of special flood hazard (100-year Floodplain) and are hereby adopted by reference and declared to be part of this Ordinance.~~

2. Exclusion of Corvallis Fault Line and Liquifaction Soils - Hazards associated with the Corvallis Fault Line and liquefaction soils are not addressed as part of this Code. Hazards associated with the Corvallis Fault Line, and with fault lines in general, are difficult to anticipate. This is in part because the Fault has not been precisely mapped and in part because other faults may exist in the area which are not yet known. The hazards posed by liquefaction soils can be addressed by the application of more stringent building construction requirements. However, the City will have a map(s) available for informational purposes to show the approximate location of the Corvallis Fault Line and the location of liquefaction soils. These hazards may need to be addressed per the requirements of the adopted Building Code and/or per the recommendations of geologic studies, etc.

4.5~~1~~4.20.02 - Coordination with Building Codes and Greater Restrictions

a. **Coordination with Building Codes** - Pursuant to the requirement established in ORS 455 that the City of Corvallis administers and enforces the State Building Codes, the City Council of the City of Corvallis does hereby acknowledge that the State Building Codes contain certain provisions that apply to the design and construction of buildings and structures located in landslide hazard and hillside areas. Therefore, this ordinance is intended to be administered and enforced in conjunction with the State Building Codes.

b. **Greater Restrictions** - This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and any other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

4.5~~1~~4.20.03 - Exceptions

Chapter 4.11 - Minimum Assured Development Area (MADA) explains how Minimum Assured Development Area (MADA) is determined. If the application of Natural Hazard regulations outside prohibited areas, or if the cumulative impact of such Natural Hazard regulations and the application of the regulations in this chapter, Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions would limit the developable portion

of a property below the property's MADA, then development will be allowed on the property, to the degree necessary to achieve the MADA, as explained in Chapter 4.11 - Minimum Assured Development Area. However, development is prohibited in certain areas, regardless of MADA, as outlined in Section 4.11.50.05 of Chapter 4.11 - Minimum Assured Development Area.

Section 4.5~~1~~14.30 - DISCLAIMER OF LIABILITY

The degree of ~~flood and other~~ Natural Hazard protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger ~~floods and~~ hazard events can and will occur on rare occasions. ~~Flood heights~~ Landslide risks may be increased by man-made or natural causes. Areas impacted by other Natural Hazards may differ from those shown on the Corvallis Natural Hazards Map. This Chapter does not imply that land outside the landslide hazard areas ~~areas of special flood hazards~~ or Uses permitted within such areas will be free from ~~flooding or flood damages~~ landslides, nor does it imply that land outside of mapped hazard areas will be free from damage or earth movement in a hazard event. This Chapter shall not create liability on the part of the City of Corvallis, any officer or employee thereof, or the Federal Insurance Administration, for any ~~flood damages or other~~ hazard damages that result from reliance on this Ordinance or any administrative decision lawfully made hereunder. Compliance with the minimum standards established by this Chapter is not intended to relieve any private party from liability for the design or construction of development which causes damage or injury by ~~increasing flooding or~~ aggravating an existing and known hazard.

Section 4.5~~1~~14.40 - PROCEDURES

Compliance with the provisions of this Chapter shall be determined through the development review processes identified in Section 1.2.110 of Chapter 1.2 - Legal Framework. Applications for Excavation and Grading Permits, Building Permits or other permits for structures on sites containing the ~~100-year Floodplain or other~~ Natural Hazard areas, as defined in Section 4.5~~1~~14.20, shall be submitted and reviewed to ensure compliance with specifications referenced herein; and to ensure that development is reasonably safe from anticipated hazards. Such applications for Excavation and Grading Permits, Building Permits or other permits for structures also include those ~~for~~ needed for Manufactured Dwellings. Other development activities as described in this provision include, but are not limited to, mining, dredging, filling, grading, paving, and excavating.

a. **Development Application** - Development applications for all properties containing or abutting a mapped Natural Hazard area shall accurately indicate the locations of these features and the location of any proposed development. Development applications shall include Floodplain Development Permits, Excavation and Grading Permits, Building Permits, Public Improvements by Private Contract Permits (PIPC), and any land use application identified in Chapter 2.1 - Comprehensive Plan Amendment through Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments. The Building Official, City Engineer, Floodplain Administrator, or

Community Development Director may determine that the following information is not necessary in conjunction with permits for work that would not exacerbate hazard conditions in any way.

b. **Required Information, General** - All such development applications shall include the following information:

1. A site plan showing the proposed development on the site, drawn to a standard scale and including an illustrated scale for use in reductions;

2. Location of all proposed infrastructure necessary to serve the proposed development. Such infrastructure includes streets, driveways, water, sanitary sewer, and storm drainage;

3. Land uses within 300 ft. of the subject property;

4. Title block;

5. North arrow and bar scale;

6. Date(s) of field check(s);

7. A grading plan, if grading is to occur, showing existing and finished contours on the site, at two- ft. contour intervals;

8. Sources of information, such as national, state, or local soil survey maps; and City maps such as Comprehensive Plan and Zoning Maps, the Natural Hazards Map, the Significant Vegetation Map, the Riparian Corridors and Wetlands Map; and date and scale of aerial photos, etc.; and

9. Any other submittal requirements identified for development in areas with specific Natural Hazards, as specified in ~~s~~Sections 4.~~5~~14.50, 4.~~5~~14.60~~,~~ and 4.~~5~~14.70.

~~**Section 4.5.50 - STANDARDS FOR AREAS OF SPECIAL FLOOD HAZARD - 100 YEAR FLOOD PLAIN**~~

(Entire Section Remained in Chapter 4.5 - Floodplain Provisions)

Section 4.~~5~~14.6~~5~~0 - STANDARDS FOR DEVELOPMENT IN STEEPLY SLOPED AREAS

4.~~5~~14.6~~5~~0.01 - Purposes - Steeply Sloped Areas Provisions -

It is the purpose of these regulations to:

a. **Provide supplementary development regulations to underlying zones to ensure that development occurs in such a manner that protects:**

1. The natural and topographic character and identity of these areas;

2. Environmental resources;

3. The aesthetic qualities and restorative value of lands; and

4. The public health, safety, and general welfare;

b. Accomplish "a," above, by ensuring that development does not create soil erosion, sedimentation of lower slopes, slide damage, flooding problems, and severe cutting or scarring; and

c. Encourage development that is responsive to natural topography and allows for a reasonable use that complements the natural and visual character of the City.

4.~~5~~14.6~~5~~0.02 - Applicability -

Steeply sloped areas are identified on the Corvallis Natural Hazards Map. The Natural Hazards Map provides information regarding the location of steep slopes on property within the Corvallis Urban Growth Boundary.

a. The following standards regulate development on areas with slopes of 15 percent or greater, which are slopes identified as having a significant hazard potential;

b. In addition to these regulations, the Hillside Development standards in Section 4.~~5~~14.~~8~~70 apply to development in areas with slopes of 10 percent or greater; and

c. No portion of this Code shall preclude the Building Official's authority to require geotechnical reports and other analyses, as deemed necessary, and in compliance with the City's currently adopted Oregon Structural Specialty Code. All construction in these areas shall be subject to currently adopted Oregon Structural Specialty Code requirements.

4.5~~1~~4.6~~5~~0.03 - Topographic Mapping Requirements -

Applications for development on properties containing areas of 15 percent slope or greater, as indicated on the Natural Hazards Map, shall include a topographic map of the development site showing two-ft. contour intervals for the entire site. This information can be obtained from the Natural Hazards database, or the applicant may submit a topographic survey prepared and stamped by a licensed surveyor or civil engineer. In either case, the topographic map shall include the following information:

a. The topographic map shall differentiate between the following slope increments:

1. equal to, or greater than 35 percent;

2. equal to, or greater than 25 percent, but less than 35 percent; and

3. equal to, or greater than 15 percent, but less than 25 percent.

b. The topographic map shall also indicate the location of all existing and proposed improvements on the development site, including existing and proposed structures; driveways, parking areas, and other impervious surface areas; and proposed retaining walls. The topographic map shall also generally indicate the location of existing trees and landscaping on the development site.

4.5~~1~~4.6~~5~~0.04 - Site Assessment -

a. Site Assessments are required:

1. In conjunction with development proposals on areas with slopes of 15 percent or more; and

2. For development in Landslide Hazard areas, as stipulated in Section 4.5~~1~~4.~~7~~60 of this Code;

b. The Site Assessment is an overview of site conditions, as well as a professional evaluation of whether or not additional studies are needed prior to development on a property. The Site Assessment shall be completed and stamped by either a Certified Engineering Geologist or by a Licensed Civil Engineer, licensed in the Specialty of Geotechnical Engineering. At a minimum, the Site Assessment shall include the following elements:

1. A field investigation of the site and vicinity;

2. A discussion of geologic hazards, if any;

3. Suitability of the site for proposed development, from a geologic standpoint;

4. If applicable, discussion of any unusual or extreme geologic processes at work on the site, such as rapid erosion, Landslide Hazard, flood hazard, rockfall, subsidence, debris run-out, or other features;

5. A list of any geologic hazards that may affect the proposed land use, including slope stability, debris flow, flooding, topography, erosion hazard, shallow groundwater, springs, expansive soils, subsidence, fault rupture, or any other geologic hazard discovered by the investigation;

6. If applicable, an identification of any areas of the site recommended to be avoided for human-occupied structures;

7. If necessary, identification of mitigation measures needed to address any anticipated geologic problems;

8. A discussion regarding the need for follow-up studies that should be conducted, such as engineering geotechnical reports, additional subsurface exploration, or more extensive soil reports; and

9. Feasibility of the site for the proposed development.

4.5~~1~~4.6~~5~~0.05 - Geotechnical (Soils Engineering) Report Requirements -

a. Geotechnical Reports are required:

1. In conjunction with development proposals in areas with slopes of 25 percent or greater;

2. When called for by a Site Assessment Report, in conjunction with development proposals in Landslide Hazard areas as stipulated in Section 4.5~~1~~4.~~7~~60 of this Code; or

3. At the discretion of the Building Official.

b. A Geotechnical Report is intended to include:

1. Data regarding the nature, distribution and strength of existing soils;

2. Conclusions and recommendations for grading procedures;

3. Design criteria for corrective measures, including buttress fill, when necessary; and

4. Opinion on the adequacy of the development site for the intended use considering the proposed grading in relation to soils engineering factors, such as slope stability.

c. When a Geotechnical Report is required by this Code, it shall comply with the requirements for such reports, as prescribed in the Development Services Division's document, once developed, to be entitled "Geotechnical Report Requirements."

d. It is the responsibility of the geotechnical engineer to provide a report and appropriate design recommendations for existing site conditions and the proposed development. The Geotechnical Report shall be completed and stamped by a Licensed Civil Engineer, licensed in the Specialty of Geotechnical Engineering by the Oregon State Board of Engineering Examiners.

4.514.650.06 - Standards for Areas with Slopes Equal to or Greater than 35 Percent -

Generally, development in these areas is strongly discouraged due to concerns with safety, ground movement, slope stability, high levels of cut and fill, and hydrological and erosion impacts. However, very limited development, as described and regulated in "a," through "d," below, may occur in areas with slopes equal to or greater than 35 percent. These standards are applicable only to the specific portions of a site which contain the specified slopes, as indicated on a topographic survey. If an applicant demonstrates, by submittal of the topographic map, that development on a property can be accommodated without encroachment into the specified slope areas, then the following standards do not apply.

a. **Development Limitations** - Streets and utilities may be located on the specified slope areas only if it can be shown that passage through the steeply sloped area is the only viable route available to afford access to the developable portion of a property;

b. **Site Assessment and Geotechnical Report Required** - Applications for development on the specified slope areas, including land use applications, Public Improvements by Private Contract Permits (PIPC), Excavation and Grading Permits, Floodplain Development Permits, and Building Permit submittals, shall be accompanied by a site assessment, geotechnical

report, and any other report deemed necessary by the site assessment report. Reports shall meet the criteria identified in sections 4.~~5~~14.~~6~~50.04 and 4.~~5~~14.~~6~~50.05. Development shall conform with all recommendations and requirements established by these required reports.

c. **Compliance with Hillside Development Standards** - Development shall comply with the Hillside Development Standards in Section 4.~~5~~14.~~8~~70.

d. **Tree Cutting Limitations** - No tree cutting is allowed on slopes equal to or greater than 35 percent, with the exception of the following:

1. Removal of a Hazardous Tree - Hazardous Trees are defined in Chapter 1.6 - Definitions. Hazardous Tree removal requests shall be consistent with Section 4.2.20.l~~, except in emergency circumstances, are required to be reviewed and approved by the Urban Forester or the Community Development Director, following receipt of a recommendation from a Certified Arborist~~;

2. Accommodation of development allowed under 4.~~5~~14.~~6~~50.06.a above; or

3. Accommodation of a public or private utility for which permits have been obtained.

4.~~5~~14.~~6~~50.07 - Standards for Areas with Slopes Equal to or Greater than 25 Percent, but less than 35 Percent -

Development in these areas should be avoided, if feasible, due to concerns with safety, ground movement, slope stability, and erosion impacts. However, the following standards shall apply for development in areas with slopes equal to or greater than 25 percent, but less than 35 percent. These standards are applicable only to the specific portions of a site which contain the specified slopes, as indicated on a topographic survey. If an applicant demonstrates, by submittal of the topographic map, that development on a property can be accommodated without encroachment into the specified slope areas, then the following standards do not apply.

a. **Site Assessment and Geotechnical Report Required** - Applications for development on the specified slope areas, including land use applications, Public Improvements by Private Contract Permits (PIPC), Excavation and Grading Permits, Floodplain Development Permits, and Building Permit submittals, shall be accompanied by a site assessment, geotechnical report, and any other report deemed necessary by the site assessment report. Reports shall meet the criteria identified in sections 4.~~5~~14.~~6~~50.04 and 4.~~5~~14.~~6~~50.05. Development shall conform with all recommendations and requirements established by these required reports.

b. **Compliance with Hillside Development Standards** - Development shall comply with the Hillside Development Standards in Section 4.~~5~~14.~~8~~70.

4.~~5~~14.~~6~~50.08 - Standards for Areas with Slopes Equal to or Greater than 15 Percent, but less than 25 Percent -

Development in these areas should be carefully evaluated, due to concerns with safety, ground movement, slope stability, and erosion impacts. The following standards shall apply for development in areas with slopes equal to or greater than 15 percent, but less than 25 percent. These standards are applicable only to the specific portions of a site which contain the specified slopes, as indicated on a topographic survey. If an applicant demonstrates, by submittal of a topographic survey, that development on a property can be accommodated without encroachment into the specified slope areas, then the following standards do not apply.

a. **Site Assessment Required** - Applications for development on the specified slope areas, including land use applications, Public Improvements by Private Contract Permits (PIPC), Excavation and Grading Permits, Floodplain Development Permits, and Building Permit submittals, shall be accompanied with a Site Assessment which meets the criteria identified in Section 4.~~5~~14.~~6~~50.04. If the Site Assessment identifies the need for a Geotechnical Report, or other reports, those reports shall be submitted with the application for development and shall be consistent with the requirements of Section 4.~~5~~14.~~6~~50.05. Development shall conform with all recommendations and requirements established by any and all required reports.

b. **Compliance with Hillside Development Standards** - Development shall comply with the Hillside Development Standards in Section 4.~~5~~14.~~8~~70.

Section 4.~~5~~14.~~7~~60 - STANDARDS FOR DEVELOPMENT IN LANDSLIDE HAZARD AREAS -

4.~~5~~14.~~7~~60.01 - Purposes - Standards for Development in Landslide Hazard Areas -

It is the purpose of these regulations to provide supplementary development regulations to underlying zones to ensure that development occurs in such a manner as to mitigate potential impacts from landslides in Corvallis. Landslide Hazard areas include High Landslide Risk areas, Existing Landslide areas, and Landslide Debris Runout areas. These areas are mapped on the Natural Hazards Map. The following regulations shall apply to development and other activities in identified Landslide Hazard areas.

4.5~~7~~14.~~7~~60.02 - Applicability - Except as provided under Section 4.5~~7~~14.~~7~~60.03, below, no person shall engage in any of the following regulated activities on properties containing or abutting the Landslide Hazard areas designated on the Corvallis Natural Hazards Map, unless it can be shown that the proposed activity is located at least 500 ft. distant from any portion of the Natural Hazard area as mapped on the Natural Hazards Map:

a. Excavation;

b. Fill;

c. Installation or construction of any accessory structure with a Building Code occupancy classification other than "U;"

d. Construction, reconstruction, structural alteration, relocation or enlargement of any building or structure for which permission is required pursuant to this Code, or the adopted Building Code; and

e. Construction or expansion of utilities, streets, driveways, or other accessways.

4.5~~7~~14.~~7~~60.03 - Site Assessment and Geotechnical Report Requirement -

a. Applications for development on properties containing or abutting identified Landslide Hazard areas, including land use applications, Excavation and Grading Permits, Floodplain Development Permits, Public Improvements by Private Contract Permits (PIPC), Building Permits, and any other development permits, shall include a Site Assessment and Geotechnical Report which meet the criteria identified in Sections 4.5~~6~~14.~~6~~50.04 and 4.5~~6~~14.~~6~~50.05. In addition to the items identified in Section 4.5~~6~~14.~~6~~50.05, the Geotechnical Report shall specifically address the presence, characteristics, and precise location of the identified hazard(s) on the subject property which is/are depicted on the Natural Hazards Map. If other reports are called for by the Site Assessment, these reports shall also be submitted.

b. Prior to issuance of permits for any work on the development site, the Building Official and/or City Engineer shall review the submitted Site Assessment, Geotechnical Report, and any other required reports. Permits shall not be issued until the Building Official and/or City Engineer approve the required reports. Upon approval of these reports, permits for construction activities may be issued, if they are in accordance with the findings and recommendations of the reports. Site inspections and submitted permit materials shall demonstrate that all necessary measures recommended by the reports and by City staff are addressed in the

construction process. In no case will permits be issued for development that would increase landslide risks on the development site, or upon neighboring properties, as indicated in the approved reports.

4.5~~7~~14.~~7~~60.04 - Required Indemnification and Release -

Prior to issuance of Building Permits for structures within or abutting Landslide Hazard areas, the applicant shall sign an agreement, provided by the City, to indemnify and release the City from potential liability resulting from damage to life or property resulting from landslides. This indemnity and release shall be recorded with the property, and shall run with the land.

Section 4.5~~7~~14.~~8~~70 - HILLSIDE DEVELOPMENT STANDARDS

4.5~~7~~14.~~8~~70.01 - Purposes -

Hillside Development standards have been developed for the following purposes:

a. To plan development to fit the topography, soil, geology, and hydrology of hillsides;

b. To align the built surface infrastructure, such as streets and waterways, with the natural contours of terrain; and to minimize cutting and filling in developments;

c. To minimize soil disturbances and the removal of native vegetation, and to avoid these activities during winter months, unless impacts can be mitigated;

d. To encourage the design of developments and the utilization of construction techniques that minimize erosion and surface water runoff;

e. To balance a view of the hills with the view from the hills;

f. To provide or maintain landscaping that enhances the identified open space resources; and

g. To design developments that consider landscaping management that will minimize the threat of fire on improved property and the spreading of fire to wildland habitat.

4.5~~7~~14.~~8~~70.02 - Applicability -

Areas with slopes of 10 percent or greater are identified on the Natural Hazards Map. The following standards regulate development on areas with slopes of 10

percent or greater. In addition to these regulations, the Standards for Development in Steeply Sloped Areas in Section 4.~~5~~14.~~6~~50 apply to development in areas with slopes of 15 percent or greater. The Natural Hazards Map provides information regarding the location of slopes of 10 percent or greater on property within the Corvallis Urban Growth Boundary.

4.~~5~~14.~~8~~70.03 - Definitions -

a. **Natural Hazards Map** - The Natural Hazards Map is based on recent aerial photography (2002) and provides a level of accuracy equivalent to two-ft. contour intervals. An applicant for development may contest the accuracy of the slope data on the Natural Hazards Map by providing a slope survey prepared and stamped by a licensed surveyor. The slope survey must show Natural Grade, prior to any site grading.

b. **Individual Lot Grading** - Grading done on an individual lot, in conjunction with the development of a building, or buildings, on the lot.

c. **Mass Grading** - Site grading done in anticipation of future development, prior to grading done to accommodate specific structures. Typically, grading for street and infrastructure improvements is done in conjunction with Mass Grading. For Subdivisions, Mass Grading is done after preliminary plat approval, but prior to application for Building Permits for individual lots.

d. **Eight-ft. Standard** - Restricts grade changes (cuts or fills) in excess of eight ft. on an individual lot or development site. Cut and fill is measured vertically from Natural Grade. In no case shall a combination of cut and fill in the same location exceed 16 ft.

e. **10- ft. Standard** - Restricts grade changes (cuts or fills) in excess of 10 ft. in an area where an exception to the Eight-ft. Standard is allowed. Cut and fill is measured vertically from Natural Grade. In no case shall a combination of cut and fill in the same location exceed 16 ft.

f. **12- ft. Standard** - Restricts grade changes (cuts or fills) in excess of 12 ft. in an area where an exception to the Eight-ft. Standard is allowed. Cut and fill is measured vertically from Natural Grade. In no case shall a combination of cut and fill in the same location exceed 16 ft.

4.~~5~~14.~~8~~70.04 - Grading Regulations -

a. **Types of Grading** - The following regulations address two types of grading, both of which are defined in Section 4.~~5~~14.~~8~~70.03, above:

1. Mass Grading; and

2. Grading on Individual Lots.

b. These regulations prescribe grading area limitations based on zoning and lot size, as set out in Sections 4.5~~1~~14.8~~7~~70.04.c.3 and 4.5~~1~~14.8~~7~~70.04.d.2.

1. On development sites where both Mass Grading and Individual Lot Grading are employed, Mass Grading and Individual Lot Grading must be contained within the same grading limitation areas. The amount of gradable area allowed, per lot, is the same under both standards. This means that when Mass Grading is employed, the area that is Mass Graded on an individual lot will be the area in which Individual Lot Grading is allowed, unless the Mass Graded area is less than the maximum gradable area allowed. In this case, additional area, up to the maximum allowed, can be graded at the time of Individual Lot Grading.

2. The remaining provisions of this Section in ~~"c,"~~4.14.70.04.c through ~~"e,"~~4.14.70.04.e, below, are organized as follows:

   a) Mass Grading Standards;

   b) Individual Lot Grading Standards; and

   c) Terracing Requirements and Design Standards.

3. Exceptions to these standards for streets may be allowed through the Planned Development process of Chapter 2.5 - Planned Development, or through the Capital Improvements Program process.

c. Mass Grading Standards - The following standards shall apply to development throughout the City of Corvallis:

1. Maximum Allowed Cut Depth and Fill Height - The following standards govern the maximum cut depth and fill height:

Site Characteristics	Maximum Cut Depth and Fill Height
No Extenuating Conditions	Eight-ft. Standard

Site Characteristics	Maximum Cut Depth and Fill Height
One Extenuating Condition	10-ft. Standard only where allowed to work around extenuating condition
Two or more Extenuating Conditions	12-ft. Standard only where allowed to work around extenuating conditions

2. Extenuating Conditions - Exceptions to the Eight-ft. Standard for Mass Grading shall be based on the following specific extenuating conditions:

   a) Street/Pedestrian Alignment - Additional Cut/Fill provides for the alignment of a necessary street or pedestrian connection. A necessary street or pedestrian connection is one which is needed to create a Block Perimeter of approximately 1,600 ft., or which is identified in an adopted City Master Plan document. A necessary street connection must comply with the slope standards in Section 4.0.60.k of Chapter 4.0 - Improvements Required with Development. Section 4.0.60.k stipulates that Arterial Streets shall not exceed a six percent grade, Collector and Neighborhood Collector Streets shall not exceed 10 percent, and Local and Local Connector Streets shall not exceed 15 percent. The width and overall extent of any street exceeding the Eight-ft. Standard shall be minimized, where feasible, to minimize grading impacts.

   b) Significant Natural Feature - Additional cut/fill is necessary to protect a Significant Natural Feature, which is defined as a feature subject to a Natural Hazards (except slopes) and/or Natural Resource Overlay on the Comprehensive Plan Map, or a Significant Tree, as defined in Chapter 1.6 - Definitions. In the case of a preserved tree, a certified arborist must find that the proposed cut/fill exception would preserve the viability of a Significant Tree that would otherwise have been damaged by the application of the Cut and Fill Standards.

   c) Detention Facilities - To accommodate stormwater detention facilities where no other viable location exists on the site.

3. Grading Area Limitations - The following requirements apply to Mass Grading in areas with slopes equal to or greater than 10 percent, as mapped on the Natural Hazards Map:

a) Low and Medium Density Residential Development Zones -

Ultimate Lot Size of Tentatively Approved Subdivision/develop-ment within Low and Medium Density Residential Development Zones	**Mass Grading Regulations**
< or = 6,500 sq. ft.	Grading up to 100 percent of the lot area is allowed. Grading shall comply with the Eight-ft. Standard, unless extenuating conditions are present.
> 6,500 sq. ft., but < 10,000 sq. ft.	Grading up to 6,500 sq. ft. of each lot is allowed. Grading shall comply with the Eight-ft. Standard, unless extenuating conditions are present.
> or = 10,000 sq. ft.	No Mass Grading is allowed. See standards for Individual Lot Grading

b) Medium-high and High Density Residential Development Zones -

Medium-high and High Density Residential Development Zones	**Mass Grading Regulations:**
RS-12, RS-12U, RS-20, and MUR Zones	For development sites greater than 6,500 sq. ft. in size - Graded area shall not exceed 75 percent. The Eight-ft. Standard shall apply, unless extenuating conditions are present.
	For development sites less than or equal to 6,500 square ft. in size - Grading of up to 100 percent of the site is allowed. The Eight-ft. Standard shall apply, unless extenuating conditions are present.

c) Nonresidential Development Zones -

Nonresidential Zones	Grading Regulations
All Commercial and Industrial Development Zones, OSU Zone, C-OS, and AG-OS Zone	For development sites greater than 6,500 square ft. in size - Graded area shall not exceed 75 percent. The Eight-ft. Standard shall apply, unless extenuating conditions are present.
	For development sites less than or equal to 6,500 square ft. in size - Grading of up to 100 percent of the site is allowed. The Eight-ft. Standard shall apply, unless extenuating conditions are present.

d. Individual Lot Grading Standards - These standards are in addition to Section 4.~~5~~14.~~8~~70.04.c, above, and apply to lots which contain slopes equal to or greater than 10 percent, as mapped on the Natural Hazards Map.

1. Maximum Allowed Cut Depth and Fill Height - The following standards govern the maximum cut depth and fill height:

Extenuating Conditions	Maximum Cut and Fill Height
No Extenuating Conditions	Eight-ft. Standard
One Extenuating Condition	10-ft. Standard only where allowed to work around extenuating condition
Two Extenuating Conditions	12-ft. Standard only where allowed to work around extenuating conditions
If lot would otherwise be unbuildable	The least extensive cut and fill necessary, not to exceed the 12-ft. Standard, to reach the Minimum Assured Development Area, as defined by Chapter 4.11 - Minimum Assured Development Area (MADA).

a) Extenuating Conditions - Exceptions to the Eight-ft. Standard for Individual Lot Grading shall be based on the following specific extenuating conditions:

1) Street/Pedestrian Alignment - Additional Cut/Fill provides for the alignment of a necessary street or pedestrian connection. A necessary street or pedestrian connection is one which is needed to create a block perimeter of approximately 1,600 ft., or which is identified in an adopted City Master Plan document.

2) Significant Natural Feature: Additional cut/fill is necessary to protect a Significant Natural Feature, which is defined as a feature subject to a Natural Hazards (except slopes) and/or Natural Resource Overlay on the Comprehensive Plan Map; or a Significant Tree, as defined in Chapter 1.6 - Definitions. In the case of a preserved tree, a Certified Arborist must find that the proposed cut/fill exception would preserve the viability of a Significant Tree that would otherwise have been damaged by the application of the Cut and Fill Standards.

3) Maintain Driveway Slope - Additional Cut/Fill is necessary to allow for the construction of a driveway at a slope of 15 percent or less. It must be demonstrated, to the satisfaction of the Building Official, that other driveway alignments have been considered and are not feasible before additional Cut/Fill is authorized.

b) Locational Standards -

1) Within the portion of each lot within 50 ft. of the edge of public right-of-way, the combination of cuts and fills may not exceed 16 ft. from Natural Grade, as measured within a linear distance perpendicular from the edge of right-of-way to the 50-ft. boundary; and

2) All retaining walls must be located at least four ft. from any property line or easement line.

2. Gradable Area - In no case shall the cumulative impact of Mass Grading and Individual Lot Grading impact more site area on an individual lot than is allowed under the following standards:

a) Low and Medium Density Residential Development Zones -

Lot size within Low and Medium Density Residential Development Zones	Grading Regulations
< or = 6,500 sq. ft.	Grading up to 100 percent of the lot area is allowed. Grading shall comply with the Eight-ft. Standard, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.
> 6,500 sq. ft., but < 10,000 sq. ft.	Grading up to 6,500 sq. ft. of each lot is allowed. Grading shall comply with the Eight-ft. Standard, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.
> or = 10,000 sq. ft.	Grading area is limited to 6,500 sq. ft. + 25 percent of lot area over 10,000 sq. ft. Grading shall comply with the Eight-ft. Standard, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.

b) Medium-high and High Density Residential Development Zones -

Medium-high and High Density Residential Development Zones	Grading Regulation
RS-12, RS-12U, and RS-20 Zones	For development sites greater than 6,500 square ft. in size - Graded area shall not exceed 75 percent. The Eight-ft. Standard shall apply, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.

Medium-high and High Density Residential Development Zones	Grading Regulation
	For development sites less than or equal to 6,500 square ft. in size - Grading of up to 100 percent of the site is allowed. The Eight-ft. Standard shall apply, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.

c) Nonresidential Development Zones -

Nonresidential Development Zones	Grading Regulations
All Commercial and Industrial Development Zones, OSU Zone, C-OS, and AG-OS Zone	For development sites greater than 6,500 sq. ft. in size - Graded area shall not exceed 75 percent. The Eight-ft. Standard shall apply, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.
	For development sites less than or equal to 6,500 sq. ft. in size - Grading of up to 100 percent of the site is allowed. The Eight-ft. Standard shall apply, unless extenuating conditions are present. Grading must also comply with adopted Building Code standards.

e. Terracing Requirements and Design Standards - When a cut or fill, or combination thereof, exceeds eight ft. and is greater than a 25 percent slope, terracing shall be provided, as follows:

1. For cuts/fills between 8-10 ft., at least one terrace shall be provided between the two- and eight-ft. level, with a shelf no less than six ft. deep. The slope of the shelf may not exceed 20 percent.

2. For cuts/fills that are more than 10 ft., risers shall not exceed four ft. in height and shelves shall be a minimum of six ft. deep. The slope of the shelf may not exceed 20 percent.

3. Terraces shall be landscaped with a combination of ground cover plants and shrubs, planted with adequate coverage to stabilize soil in the terraced areas. Trees shall be required, at a minimum 30 ft. on-center spacing, to mitigate trees removed due to grading and to stabilize soil in the shelf area. Irrigation and maintenance for required landscaping shall be addressed as stipulated in Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting.

4. Wall materials and landscaping shall be subject to final review and approval by the City Engineer and Community Development Director. Acceptable exterior wall materials include quarried stone, brick, concrete masonry, and similar quality materials. Additional flexibility shall be allowed for wall materials for retaining walls which are wholly internal to the development site, provided the materials and design meet Oregon Structural Specialty Code requirements. Retaining walls shall comply with all applicable Building Code requirements.

5. Exceptions to the terracing requirement may be allowed by the City Engineer and Community Development Director if the applicant demonstrates, with the submittal of a report from a certified arborist, qualified Stream scientist, or qualified wetlands scientist that potential impact to an existing Significant Tree or a Significant Natural Feature in the area of the cut and fill would be significantly reduced by an exception to the terracing requirement.

   A Significant Natural Feature is defined in Chapter 1.6 - Definitions. In the case of a preserved tree, a certified arborist must find that the proposed retaining wall treatment would preserve the viability of a Significant Tree that would otherwise have been damaged by the application of the Cut and Fill Standards, and that the Tree's continued growth will not adversely affect the structural integrity of the wall.

6. Per Chapter 2.12 - Lot Development Option, exceptions to the requirements in "1," through "5," above, may be granted through the Lot Development Option process, if the exceptions qualify as a Minor or Major Lot Development Option. The Lot Development Option may allow an increase in retaining wall height of up to 20 percent of the permitted height, or a reduction of shelf width of up to 20 percent of the required depth, subject to compliance with all Lot Development Option criteria in Section 2.12.30.06 of Chapter 2.12 - Lot Development Option.

4.~~5~~14.~~9~~80 - MAP REFINEMENTS

4.~~5~~14.~~9~~80.01 - Map Refinements Defined -

Map Refinements are adjustments made through professional analyses to refine the actual boundaries of some Natural Resources and Natural Hazards. Map Refinements must be made in accordance with the provisions in Chapter 4.5 - ~~Natural Hazard and Hillside Development~~ Floodplain Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. ~~and~~ The Map Refinements governed by this chapter are specifically allowed to determine the location and extent of the:

~~**a.** 0.2-ft. Floodway;~~

~~**b.** 1.0-ft. Floodway, in accordance with FEMA regulations;~~

~~**c.** 100-year Floodway Fringe, in accordance with FEMA regulations;~~

~~**d**~~**a.** Landslide Hazard areas; and

~~**e**~~**b.** Slopes~~;~~.

~~**f.** Top-of-bank of Streams and rivers;~~

~~**g.** Riparian Corridors, once Top-of-bank is accurately determined; and~~

~~**h.** Wetlands, through delineations approved by the Oregon Department of State Lands.~~

4.~~5~~14.~~9~~80.02 - Map Refinements Provisions -

Map Refinement provisions for ~~the 0.2-ft. Floodway, the 1.0-ft. Floodway, the 100-year Floodway Fringe,~~ Landslide Hazard areas~~,~~ and slopes are outlined below. Map Refinement provisions for the 0.2-ft. Floodway, the 1.0-ft. Floodway, and the 100-year Floodway Fringe are outlined in Chapter 4.5 - Floodplain Provisions. Map Refinement provisions for Top-of-bank, Riparian Corridor, and Wetland boundaries are outlined in Chapter 4.13 - Riparian Corridor and Wetland Provisions. Map Refinements are also adjustments to resolve registration issues that may occur between different GIS layers or maps.

~~**a.** **Floodplain and Floodway Boundaries** - The precise locations of Floodplain and Floodway boundaries are determined as follows:~~

1. ~~0.2-ft. Floodway - Surveyed and mapped by a licensed surveyor or civil engineer, using two-ft. contour intervals established by the survey, and outlining a river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than 0.2 ft.~~

2. ~~1.0-ft. Floodway - Surveyed and mapped by a licensed surveyor or civil engineer, using two-ft. contour intervals established by the survey, and outlining a river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than one ft.~~

3. ~~100-Year Floodplain - Surveyed and mapped by a licensed surveyor or civil engineer, using the Base Flood Eelevations established by the Federal Emergency Management Agency (FEMA) and two-ft. contour intervals established by the survey.~~

~~b~~a. **Landslide Hazard Area Boundaries** - The precise locations of Landslide Hazard area boundaries are determined by one of the following two methods:

1. Site Assessments and/or Geotechnical Reports, as required per Section 4.5~~1~~4.~~7~~6~~0~~; or

2. Information provided by the Oregon Department of Geology and Mining Industries (DOGAMI), once it has been developed and finalized by DOGAMI.

If these areas are not precisely mapped by one of these two methods, the 500-ft. setback required by Section 4.5~~1~~4.~~7~~6~~0~~.02 shall be maintained.

~~c~~b. **Slope Boundaries** - The precise locations of the steep slope boundaries are determined by one of the following two methods, consistent with the provisions of Section 4.5~~1~~4.~~6~~5~~0~~.03:

1. Using the information from the Natural Hazards database and creating a topographic map of the development site showing two-ft. contour intervals; or

2. Using a topographic survey, showing two-ft. contour intervals, prepared and stamped by a licensed surveyor or civil engineer.

4.5~~1~~4.~~9~~8~~0~~.03 - Map Refinement Procedures

Adjustments to maps consistent with the provisions of Sections 4.~~5~~14.~~9~~80.01 and 4.~~5~~14.~~9~~80.02, above, are considered to be Map Refinements and may be Ministerially adjusted on the relevant maps, with no land use process required other than a demonstrated adherence to the provisions of sections 4.~~5~~14.~~9~~80.01 and 4.~~5~~14.~~9~~80.02.

4.~~5~~14.~~10~~90 - MAP CORRECTIONS

No Zone Change or Comprehensive Plan Map Amendment shall be required to accomplish Map Corrections approved in accordance with the provisions outlined in this Section.

a. Decisions regarding Map Correction requests shall be made by the Community Development Director, as specified in sections 4.~~5~~14.~~10~~90.01 and 4.~~5~~14.~~10~~90.02, below. Upon approval of a Map Correction request, the Director shall ensure that changes are reflected in the City's affected maps and databases. Notice of such Map Correction shall be provided to decision-makers as outlined in Section 4.~~5~~14.~~10~~90.b, below.

b. When requests for five Map Corrections on any Natural Hazard or Natural Resource for which a Map Correction is allowed have been submitted to and decided upon by the Community Development Department Director, or approximately twice a year, whichever is sooner, the Map Correction requests shall be summarized in an informational memo for decision-makers so that they may review them for tracking purposes in accordance with Comprehensive Plan Policy 4.2.6. This memo shall be shared with the Corvallis Planning Commission and City Council for Map Correction requests on lands within the City limits; and with the Corvallis and Benton County Planning Commissions, the Corvallis City Council, and the Benton County Board of Commissioners for Map Correction requests on lands within the Urban Fringe.

4.~~5~~14.~~10~~90.01 - Map Corrections Defined

a. A Map Correction is not the type of adjustment described in the Map Refinement provisions of Section 4.~~5~~14.~~9~~80, above. A Map Correction is, however, an actual correction to maps referencing Natural Hazards or Natural Resources other than Significant Vegetation areas, where it is found that the map depiction does not reflect the Natural Features Inventory. As the Natural Features Inventory (NFI) was the basis for developing the City's maps that reference Natural Hazards and Natural Resources, a correction to the NFI for Natural Hazards or Natural Resources other than Significant Vegetation areas could result in a correction to the related maps. These maps include the Comprehensive Plan Map, Local Wetlands Inventory Map, Official Zoning Map, Natural Hazards Map, or Riparian Corridors and Wetlands Map.

Map Correction provisions for ~~the100-year Floodplain and~~ Landslide Hazard areas are outlined below. Adjustments to other hazards governed by this chapter are not Map Corrections, but are Map Refinements and are addressed through the provisions of Section 4.~~5~~14.~~9~~80, above. Map Correction provisions for Floodplains are outlined in Chapter 4.5 - Floodplain Provisions and Map Correction provisions for Riparian Corridor widths and Wetland boundaries are outlined in Chapter 4.13 - Riparian Corridor and Wetland Provisions.

~~**a. 100-Year Floodplain** - Map Corrections for 100-year Floodplain information may be approved by the Community Development Department Director subsequent to the approval of a Letter of Map Amendment (LOMA) by the Federal Emergency Management Agency (FEMA). The Director shall only correct the 100-year Floodplain portion of the City's maps to exactly reflect FEMA decisions.~~

b. Landslide Hazard Areas - Landslide Hazard area boundaries may be refined through the Map Refinement procedures outlined in 4.~~5~~14.~~9~~80, above. However, if technical data demonstrates that no Landslide Hazard exists within or near an area identified as a potential Landslide Hazard on the City's maps, a Map Correction may be accomplished to delete the Landslide Hazard indication from the maps. Such technical data must be from:

1. A site assessment and geotechnical report; or

2. The Oregon Department of Geology and Mining Industries (DOGAMI).

4.5~~1~~4.~~10~~90.02 - Map Corrections Procedures for Landslide Hazard Areas - ~~**a. 100-Year Floodplain** - Map Corrections for 100-year Floodplain information may be requested following written verification of a Letter of Map Amendment (LOMA) approved by the Federal Emergency Management Agency (FEMA). When the FEMA determines that a LOMA should be approved, and written documentation of the approval is provided to the Community Development Director, the Director shall ensure that changes reflected in the LOMA are reflected in the City's affected maps and databases. **b. Landslide Hazard Areas -**~~ There are two procedures available for a Map Correction involving the removal of a Landslide Hazard area from the Natural Hazards Map.

~~1~~**a.** Removal of a Landslide Hazard Area from Determination by the Oregon Department of Geology and Mining Industries (DOGAMI) -

If in finalizing its data and maps regarding Landslide Hazard areas the Oregon Department of Geology and Mining Industries (DOGAMI)

determines that no Landslide Hazard exists within or near an area identified as a potential Landslide Hazard on the Natural Hazards Map, then a Map Correction to remove indication of the Landslide Hazard area shall be done by the Community Development Department Director, following written verification of the DOGAMI's determination. When such written documentation of the determination is provided to the Director, the Director shall ensure that the changes reflected by the DOGAMI decision are reflected in the City's affected maps and databases.

~~2~~**b.** Removal of a Landslide Hazard Area from Determinations Reached by a Site Assessment and Geotechnical Report -

If a property owner or property owner's legal representative provides the Community Development Department Director with the items listed in "~~a~~1," below, a request to remove indication of a Landslide Hazard area from the Natural Hazards Map and other affected maps may be considered as outlined in "~~b~~2," and "~~c~~3," below.

~~a)~~1. For a Map Correction request to consider removal of a Landslide Hazard from the Natural Hazards Map and other related maps, the following information is required:

~~1~~a) A Site Assessment and Geotechnical Report which meet the criteria identified in sections 4.~~5~~14.~~6~~50.04 and 4.~~5~~14.~~6~~50.05. In addition to the items identified in Section 4.~~5~~14.~~6~~50.05, the Geotechnical Report shall specifically address the lack of presence, characteristics, and/or precise location of the identified hazard(s) on the subject property which is/are depicted on the Natural Hazards Map. If other reports are called for by the Site Assessment, these reports shall also be submitted; and

~~2~~b) An indemnification and release agreement in accordance with the provisions of Section 4.~~5~~14.~~7~~60.04;

~~b)~~2. For lands within the City limits, Map Correction requests shall be reviewed by the Building Official and City Engineer, in coordination with the Community Development Department. The Community Development Director shall make the final decision. For lands within the Urban Fringe, Map Correction requests shall be reviewed by the Building Official and City Engineer, in coordination with the Corvallis Community Development Department and the Benton County Development Department. For the Urban Fringe lands, the Corvallis Community Development Department Director shall also make the final decision.

~~c)~~3. To approve a Map Correction request, the Director must find that:

~~1~~a) The information required by "~~a~~1," above, has been provided and is complete;

~~2~~b) The required technical reports and recommendations sufficiently demonstrate that there is no Landslide Hazard on or near the area identified on the Natural Hazards Map; and

~~3~~c) The required technical reports and recommendations sufficiently demonstrate that development on the subject area would not increase landslide risks on the development site, or upon neighboring properties.

EXHIBIT C

COUNCIL-DIRECTED REVISIONS TO LDT10-00001

(TO BE DEVELOPED FOLLOWING BOTH PLANNING COMMISSION AND CITY COUNCIL PUBLIC HEARING PROCESSES FOR LDT10-00001. THE REVISIONS WILL BE DETERMINED BY THE CITY COUNCIL DURING DELIBERATIONS FOR LDT10-00001)

Community Development
Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339-1083
(541) 766-6908
FAX: (541) 754-1792
Planning@ci.corvallis.or.us

CORVALLIS PLANNING COMMISSION
NOTICE OF DISPOSITION

ORDER NO. 2011-008

CASE: **LEGISLATIVE AMENDMENT TO THE LAND DEVELOPMENT CODE TO ADDRESS FEMA REQUIREMENTS (LDT10-00001)**

REQUEST: **Consider adoption of legislative revisions to the Corvallis Land Development Code to address new Federal Emergency Management Agency (FEMA) floodplain maps and regulations.**

APPLICANT City of Corvallis

LOCATION Applies to properties Citywide.

DECISION The Corvallis Planning Commission conducted, after proper legal notice, a public hearing concerning this Legislative Amendment to the Land Development Code (LDT10-00001) on February 2, 2011. Interested persons and the general public were given an opportunity to be heard. The Planning Commission conducted deliberations on this matter on February 16, 2011. The Commission found that the proposed request, regarding revision of the Land Development Code to address federal National Floodplain Insurance Program floodplain regulations, should be modified as shown in Attachment A to this Notice of Disposition and forwarded to the City Council with a recommendation of approval. The Planning Commission adopted the findings contained in the January 21, 2011, staff report and the February 15, 2011, staff memo, and the Planning Commission findings in support of the Text Amendment, as expressed during its February 16, 2011, deliberations.

Jennifer Gervais, Chair
Corvallis Planning Commission

SCANNED

Date: 02.18.11 By: [illegible]

EXHIBIT II - PC NOD - PAGE 1

APPEALS

The Planning Commission decision on this matter is a recommendation to City Council and is not appealable. The City Council is **tentatively** scheduled to review the Land Development Code Text Amendment application on April 4, 2011, during a *de novo* public hearing. However, this date is not a final date and persons interested in attending the Council public hearing on this matter are encouraged to contact the City Planning Division at (541) 766-6908 to verify the final date selected for the public hearing. The City Council decision on this matter will be final unless the case is appealed to the State Land Use Board of Appeals (LUBA). Appeals to LUBA may be filed within 21 days of the date a City Council notice of disposition is signed and must be filed by 5:00 p.m. on the final day of the appeal period. Where the final day of an appeal period falls on a weekend or holiday, the appeal period shall be extended to 5:00 p.m. on the next work day.

The proposal, staff report, and hearing minutes may be reviewed at the Community Development Department, Planning Division, at the temporary City Hall location of 2300 NW Walnut Boulevard, Corvallis, Oregon.

Notice of Disposition Signed - February 17, 2011

The complete record associated with this case is available in the City of Corvallis Planning Division offices, which are located at the temporary location of City Hall, 2300 NW Walnut Boulevard, Corvallis, Oregon.

ATTACHMENT:

A. Planning Commission-directed modifications to the Proposed Legislative Amendment to the Land Development Code (LDT10-00001)

B. Proposed Legislative Amendment to the Land Development Code (LDT10-00001)

EXHIBIT II - PC NOD - PAGE 2

ATTACHMENT A

PLANNING COMMISSION-DIRECTED MODIFICATIONS TO THE PROPOSED LEGISLATIVE AMENDMENT TO THE LAND DEVELOPMENT CODE (LDT10-00001)

1. Incorporate additional performance criteria into Land Development Code Section 4.5.100.01.b (Attachment page A-361 of 1/21/11 Planning Commission staff report), as follows:

   b~~2~~. Areas of fill and excavation shall be designed to accommodate floodwater flows and shall not create barriers to the flow of floodwater. Proposals to alter topography in the Floodplain must demonstrate that they will not result in alteration of hydrology or flow regimes that would cause erosion, ~~unwanted~~ ponding, new or increased drainage onto neighboring properties, or other problems;

2. Modify the proposed definition for Federal Flood Zone (Attachment pages A-98 & A-99 of 1/21/11 Planning Commission staff report) to be consistent with the current Base Flood definition which includes the phrase ***"one percent chance of being equaled or exceeded in any given year."***

3. Correct a typographical error in Section 4.5.110.12.a.2 (Attachment page A-370 of 1/21/11 Planning Commission staff report). The last paragraph of that section has a reference to Section 2.11.40.b.2 and that section does not exist. The cross reference needs to be changed to cite Section 4.5.110.12.b.

4. Modify the lead-in paragraph to Section 2.11.40 - Exemptions (Attachment page A-192 of 1/21/11 Planning Commission staff report) to insert a cross-reference to Chapter 4.13 - Riparian Corridor and Wetland Provisions and any other appropriate Natural Features Code provisions.

5. Modify text that references the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines (such as the one in Section 4.5.90.01.i on Attachment page A-356 of 1/21/11 Planning Commission staff report), so that it is understood that maintenance conducted according to these guidelines must also be done consistent with and in the context of the provisions in Chapter 4.13 - Riparian Corridor and Wetland Provisions and other applicable Natural Features Code provisions.

6. Modify Section 4.5.110.07.b (Attachment page A-367 of 1/21/11 Planning Commission staff report) to insert a parenthetical phrase that states that fences and walls are not governed by this Section, but are governed by the standards in Section 4.5.110.12.

7. Modify Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit (Attachment page A-371 of 1/21/11 Planning Commission staff report) to change the Floodway fencing text in the row for fencing types C & D and in the row for fencing types E & F. Delete the currently proposed text and replace it with the same text that is used for Floodway fencing in the row for fencing type B.

8. Modify Section 4.5.100.01 (Attachment pages A-361 and A-362 of 1/21/11 Planning Commission staff report) to limit the location where and the circumstances under which volumetric exchange can be used, as follows:

   a. Create a new Section 4.5.100.01.a and re-letter the existing subsections in Sections 4.5.100.01.a-e accordingly.

   b. Develop precise Code language for the new Section 4.5.100.01.a to limit the use of volumetric exchange to the following areas:

      1. Floodway Fringe portions of the Mill Race and Willamette and Marys Rivers; and

      2. Floodway Fringe portions of other local streams, provided the area is designated as Partial Protection Floodplain on the Natural Hazards Map and at least one of the following is true:

         a) The development is nonresidential construction; or

         b) The development is residential construction and the development is less than a Substantial Improvement; or

         c) The development is residential construction on a site where the natural grade is such that, to achieve a finished floor elevation of one foot above Base Flood Elevation, flow-through design will not result in a crawlspace consistent with FEMA standards; or

         d) The development is a garage; or

         e) The development is a driveway or building access.

      (Note: it is understood that the parameters listed above are generally worded to provide direction to staff and that staff will develop the precise wording and terminology to accomplish these parameters for City Council consideration.)

ATTACHMENT B

Proposed Legislative Amendment to the Land Development Code (LDT10-00001)

A FULL COPY OF LAND DEVELOPMENT CODE TEXT CHANGES FOR LDTR10-00001 IS AVAILABLE FOR REVIEW AT:

- **Corvallis-Benton County Public Library**
  645 NW Monroe Ave.

- **www.ci.corvallis.or.us**
  1. **Click on Departments;**
  2. **Click on Community Development;**
  3. **Click on Planning;**
  4. **Click on FEMA Flood Map Revisions;**
  5. **Click on Proposed Land Development Code Text Amendment**

- **City of Corvallis Planning Division**
  2300 NW Walnut Blvd.

EXHIBIT II - PC NOD - PAGE 5

Community Development
Planning Division
501 SW Madison Avenue
Corvallis, OR 97333

Approved as submitted, March 16, 2011

CITY OF CORVALLIS
PLANNING COMMISSION MINUTES
February 16, 2011

Present
Jennifer Gervais, *Chair*
Frank Hann
Tony Howell
James Feldmann
Jim Ridlington
Jasmin Woodside (arr. 7:07 pm)
Biff Traber, *Council Liaison*

Staff
David Coulombe, Deputy City Attorney
Kevin Young, Planning Division Manager
Kelly Potter, Senior Planner
Jeff McConnell, Development Engineer Supervisor
Lisa Franklin, Civil Engineer I/Certified Floodplain Manager
Mark Lindgren, Recorder

Excused
Tad Abernathy
Steve Reese
Roger Lizut

Visitors
Annette Mills

SUMMARY OF DISCUSSION

	Agenda Item	Information Only	Held for Further Review	Recommendations
I.	Visitors' Propositions	X		Annette Mills highlighted the March 9 Annual Sustainability Fair and Town Hall.
II.	Deliberations- Land Development Code Text Amendment to Address FEMA Floodplain Maps (LDT10-00001)			Main motion to recommend LDC Text Amendment (LDT10-00001) approval to the Council passed 4-0, with one abstention; along with amending motions.
III.	Minutes: January 5, 2011 January 19, 2011			Jan. 5, 2001 minutes approved as corrected. Jan. 19, 2011 minutes approved as presented.
IV.	Old Business	X		None.
V.	New Business A. Planning Manager's Update.	X		Manager Young presented updates.
VI.	Adjournment – 9:20 p.m.	X		

EXHIBIT III - 2/16/11 PC MINUTES - PAGE 1

CONTENT OF DISCUSSION

The Corvallis Planning Commission was called to order by Chair Jennifer Gervais at 7:04 p.m. in the Downtown Fire Station Meeting Room, 400 NW Harrison Boulevard.

I. VISITORS' PROPOSITIONS:

Annette Mills of the Corvallis Sustainability Coalition invited Commissioners and the public to the March 9 Annual Sustainability Fair and Town Hall at the CH2M Hill Alumni Center at OSU. She noted that this year's focus is on economic sustainability.

II. DELIBERATIONS- Land Development Code Text Amendment to Address FEMA Floodplain Maps (LDT10-00001):

Senior Planner Kelly Potter noted there was a public hearing at the previous meeting, which was then closed. She noted that the written record was held open for seven days, during which time additional testimony was received and mailed to the Commission. Additional testimony beyond that period was sent to Commissioners via an emailed memo yesterday. She recapped the process to this point, saying that the Land Development Code (LDC) requirements for all Natural Resources and Natural Hazards were developed during a lengthy public process as part of the Natural Features Project between 2000 and 2004. The current LDC represents a balance between Natural Resources and Natural Hazards protection, housing opportunities, and economic development opportunities.

The Code changes proposed as part of this legislative amendment to the LDC are in direct response to a mandate by the Federal Emergency Management Agency (FEMA). They will result in an increase in restrictions in the 100-Year Floodplain above those which were there after the Natural Feature Project. An entirely new floodplain development program is being introduced, along with numerous new development standards. Planner Potter said that staff sought to work the mandated FEMA requirements into the existing package of Natural Hazards and Natural Resource standards as much as possible. Staff sought to introduce flexibility for property owners while still complying with the FEMA mandate, along with the prior balancing efforts done during the Natural Features Project. The LDC Text Amendment does not revisit the final balancing accomplished as part of the Natural Features Program and does not further restrict development unless directly mandated to do so by FEMA.

Planner Potter said four main concerns were raised during the Planning Commission public hearing process. The first was related to the reference in the Code Text Amendment to the Public Works Urban Stream Maintenance Guidelines. The concern was that the Guidelines did not seem fully consistent with protecting the properly functioning condition of streams, and that they allowed things above and beyond what the current LDC allows with regard to Riparian Corridor preservation and the like. The references where the Urban Stream Maintenance Guidelines are mentioned are in a list of things that are allowed to be exempt from obtaining a floodplain development permit. She noted that, even though there was a list of exemptions in terms of what things need a floodplain permit and what don't, that does not exempt one from complying with all the rest of the requirements of the LDC. The requirements in Chapter 4.13, which specifically deal with riparian corridors, still apply, and any of the changes in the Text Amendment are in the context of those requirements. This should not provide any additional leeway for stream maintenance. Planner Potter stated there was additional information on the matter in the memo; staff believes that because the

maintenance occurs in the context of the rest of the LDC requirements, no changes are needed in the Text Amendment to address this issue.

Another concern raised was regarding fences and walls and the threshold used to determine whether a fence or wall was exempt from the need for a floodplain development permit. Section 2.11.40 in the proposed Text Amendment outlines activities that are exempt from the floodplain development permit process. That section notes that if a fence or wall is located in an area where the floodwater velocity is less than five feet per second, then the fence or wall is exempt and a floodplain development permit is not needed. Testimony asserted that five feet per second is not a slow flow, that erosion can occur at lower velocities, and that several parts of the Text Amendment would conflict with existing floodplain protections. That testimony cited sections including Section 2.11.40 and parts of the fence design standards table in Chapter 4.5 (Section 4.5.110.12). Specifically, the concern raised was that there would be conflicts with existing protections in the High Protection Riparian Corridor areas, in Floodways, High Protection Floodplains, and similar areas. Planner Potter said that there may have been a misunderstanding of the issue. She noted that any fences or walls that are proposed must also comply with the rest of the Land Development Code's requirements, which are not being relaxed. She clarified that where you already *are* allowed to do a fence, then these new fence and wall requirements would kick in. Where fences and walls are not allowed, then the point is moot.

Planner Potter highlighted the lead-in statement to Section 2.11.40, which outlines the floodplain development permit exemptions. That lead-in statement provides the context for activities that are exempt from that permit. The provision states, *"If allowed by other applicable chapters in this Code (floodplain development may be prohibited per Chapter 4.5 - Floodplain Provisions, or other restrictions may apply) the following types of development are exempt from the Floodplain Development Permit process:.."*. The current Code prohibits fences and walls in highly protected floodplain areas such as High Protection Floodplain and Floodway areas. The Text Amendment would not change this fact. Where Code provisions allow fences and walls to be built in other floodplain areas (such as Partial Protection Floodplain areas), if the floodwater velocity is less than five feet per second, a property owner would not need to get a Floodplain Development permit and would not be subject to additional design standards. Fences and walls can be constructed in these areas today, under the current Code; the proposed fence and wall standards are not a relaxed standard.

The Text Amendment increases fence and wall restrictions, over and above what is required today. If you happen to propose a fence or wall in an area with a floodwater velocity of at least 5 feet per second, you will now be subject to design standards and be required to obtain a Floodplain Development Permit. She added that the issue of fences was a difficult subject due to the small size of urban lots; instituting permit programs for fences and walls is difficult and can cause considerable frustration to landowners. Staff believes that since FEMA is not mandating fence and wall standards that are stricter than those included in the Text Amendment, it is not appropriate to go to an additional level of restriction for fences and walls beyond what is proposed.

Planner Potter stated that volumetric exchange represents a balance between cut and fill and is a concept that exists in the current Code. The Code allows use of that tool for properties in the floodway fringe areas of the Willamette River, Mary's River, and the Millrace. It currently does not allow one to use volumetric exchange in other floodway fringe

areas. After looking at other areas of the community, there are small partial protection floodway fringe areas along streams that could be helped by using the volumetric exchange tool. Examples include partial protection floodway fringe areas along Dixon Creek, the urbanized portion of Dunawi Creek, and a small area on OSU where the Oak Creek floodplain meets the Mary's River floodplain. Many of these areas have Floodway protection for a good part of the floodplain, so there were fairly limited areas of partial protection floodway fringe along those urbanized sections of streams. Planner Potter stated that the overall impact of allowing the volumetric exchange tool to be used on those partial protection floodway fringe properties would be fairly negligible. Staff recommended adding those areas to the areas where volumetric exchange was allowed in order to provide flexibility for property owners. She stated that some of these properties have grades that may only be six inches shy of the required finished floor elevations. In these cases, property owners could probably achieve the balanced cut and fill associated with volumetric exchange by doing a small, fairly evenly distributed, amount of regrading.

There are instances where people are allowed by FEMA to construct a garage below the base flood elevation. In these situations, the garage is classified as non-habitable. However, safety problems can be created down the road of the property owner, without City permission, changes the structure into habitable area. If volumetric exchange were allowed within initial construction of the garage, in many instances the garage could be built to achieve a habitable status (the finished floor is one foot above the base flood elevation) and the safety problem could be avoided.

Other practical considerations support the need for volumetric exchange in these additional urbanized partial protection floodway fringe areas. For example, even if flow-through design is used to construct a garage, getting the driveway up to meet it would require a fill area. The current Code doesn't allow such a fill, even as a balanced cut and fill on a site, outside the floodway fringes of the Willamette and Marys Rivers and the Mill Race. This type of dilemma shows the practical construction issues that can arise in the other urbanized partial protection floodway fringe areas. The proposed expansion of volumetric exchange to include all partial protection floodway fringe areas is seen as a way to provide flexibility to property owners, while still being consistent with the existing Natural Features Program. It is also not anticipated to cause major impacts to the floodplain or decrease stream functionality. The reason that the currently mapped partial protection floodway fringe areas outside the Willamette and Mary's Rivers and Millrace floodplains have partial protection is in recognition of their already urbanized state.

Regarding testimony concerns about the proposed Text Amendment's consistency with Comprehensive Plan Policy 4.8.2, the Natural Features Program process looked at sub-parts of that Comprehensive Plan policy very closely; there is a lot of subjective language in the policy that allows balancing. This balancing was done as part of the Natural Features Project. All the policies of the Comprehensive Plan were balanced, in terms of Natural Hazard and Natural Features protection, and housing and economic opportunities. The current Code reflects the conclusions reached at the end of those prior balancing efforts. The current Land Development Code and the proposed Text Amendment are not in conflict with Policy 4.8.2.

The list of performance criteria for volumetric exchange is in the Code, but page 7 of the February 15, 2011, supplemental memo to the Planning Commission describes two small changes that would ensure that no ponding of water and no off-site drainage impacts would

be allowed as a result of trying to implement volumetric exchange. For example, creating a pond would impact the function of the floodplain. Also, you don't want a design that causes new or increased drainage onto neighboring properties. Planner Potter said staff recommends those changes.

Planner Potter related that there was a missing phrase in the FEMA Federal Flood Zone definitions in Chapter 1.6 - Definitions. Staff recommended that the phrase "in any given year" should be added to "one percent chance or greater of flooding". FEMA directed the City to ensure that floodplain-related Code definitions use the phrase "the flood having a one percent chance of being equaled or exceeded in any given year". She noted that FEMA had not updated its own Federal Food Zone definition table to reflect the direction it gave the City. Staff recommends that the proposed Federal Flood Zone definition in Section 1.6.40 be amended to incorporate the correct updated FEMA direction.

Planner Potter highlighted the question Chair Gervais raised in her email today about where the five feet per second floodwater velocity standard came from for fence and wall exemptions to floodplain development permits. The five feet per second floodwater velocity standard in the text that exempts someone from having to obtain a floodplain development permit for an fence or wall came from FEMA Region X and the State Department of Land Conservation. Secondly, Chair Gervais asked in her email how fast water had to move to create a pressure of 20 pounds per square foot; Planner Potter explained that there wasn't really a relationship between water velocity and water pressure. Standing water with some gravity will open flow-through flaps in fences; the figure is found in the table in Chapter 4.5. She said there was an incorrect cross-reference that Chair Gervais found that staff would fix (Section 4.5.110.12a references a section in the Floodplain Development Permit Chapter that does not exist).

Planner Potter related that Chair Gervais' email also asked how the Floodplain Administrator would determine the floodwater velocity if FEMA doesn't give it; presumably, the intent is to figure out conditions during a 100-year flood event. Planner Potter explained that the Flood Insurance Study (FIS) text that accompanies the flood insurance rate maps has the floodwater velocity information in it. As an analogy, Planner Potter said base flood elevation cross-sections along the various streams in Corvallis are also included in the FIS. If someone has property in between those cross-sections, he/she comes to Certified Floodplain Manager Lisa Franklin in Development Services, and she interpolates the base flood elevation for his/her property. Similarly, there are floodwater velocities in the flood insurance study for various points along Corvallis streams; if someone asks about property between these points, staff would help him/her interpolate the information to get a precise speed. For areas *outside* where FEMA has studied, there is nothing in the flood insurance study that addresses it. The simplest option for a property owner in those circumstances is to simply get a Floodplain Development Permit and comply with fence and wall design standards in Chapter 4.5. Alternatively, the property owner could do his/her own floodwater velocity study; but it would be cheaper and easier to simply get a floodplain development permit and comply with the proposed Code design standards.

Commissioner Frank Hann asked if a property owner wanted do a Letter of Map Amendment (LOMA) to do a modification to that, whether the City would be able to try to interpolate that; Planner Potter replied that the LOMA process is a different process. It involves a property owner having a property surveyed so that he/she can prove that the actual field base flood elevations for that site are above that base flood elevations shown on

the flood insurance rate map. The LOMA process formalizes the survey data and removes part or all of the property from the 100-year floodplain (depending on the results of the field survey). Commissioner Hann summarized that it would require an outside contractor. Planner Potter said that was correct and that when a property owner comes in and questions the FEMA points, staff then suggest the owner hire his/her own surveyor and staff helps him/her through the FEMA application process; many LOMAs have been approved by FEMA throughout the community.

Commissioner Hann asked about the recommended change in language stating that a property owner must demonstrate that changes will not result in alterations to hydrology, cause erosion, ponding, new or increased drainage on neighboring properties, or other problems. He noted that some communities have chosen to do flood control projects in order to reclaim land by diverting floodwaters to adjacent low-lying areas; however, if the City tried to do that in the future, this language would constrain that choice. Planner Potter disagreed; she said this Code provision just prohibits ponding associated with volumetric exchange in the partial protection floodway fringe areas. If someone is digging a pond in a back yard and it is not designed to connect to anything, that is the scenario the “no ponding” requirement is designed to address. Commissioner Hann said the phrase that prohibits “new or increased drainage on an adjacent property” implies that the City could not divert floodwater to a neighboring property, even if it is part of a municipal plan. Planner Potter said that what Commissioner Hann was contemplating was greater in scope than what would happen through volumetric exchange.

Commissioner Hann asked the date that FEMA created the base floodplain elevations; Planner Potter replied it did so in 1984. Commissioner Hann said it appeared that the floodplain isolated cul-de-sacs from Satinwood to Maxine, for example; he asked if that created a problem for the City in terms of planning for evacuations or creating responsibility for that. Planner Potter replied that every community has these floodplain areas; it is only a matter of who is subject to regulations or flood insurance with a mortgage bank loan, and put on notice to make their property safer by potentially taking advantage of what one can do under one’s home to increase venting, etc.

Commissioner Hann asked if such areas, which require crossing a floodplain area for access, would be allowed today; Planner Potter replied that it depends what part of the Code you are talking about. For example, there are exceptions for streets in all the differently designated floodplain areas. As part of the initial land use review of those types of projects, Public Works would ensure that there are ways in and out of sites; Block Perimeter criteria requires ways in and out and seeks to avoid isolated cul-de-sac situations. Engineering Supervisor Jeff McConnell concurred, adding that it is rare to have isolated areas with such issues; it is something to look at in designing streets and, if necessary, to discuss with the Fire Department.

Planning Division Manager Kevin Young, responding to Commissioner Hann’s earlier question, highlighted provisions of the Code that address watercourse relocation, such as Section 4.5.80.02, saying that these are very rare circumstances. This Code provision describes circumstances and extremely stringent requirements that would have to be met and in place before the City would allow relocation of a watercourse, though it is conceivable it could be done.

Commissioner Tony Howell stated he fully concurred with Planner Potter's statement about trying hard not to revisit the balancing that went on during the Natural Features Project, which also incorporated the policies already in place from the Stormwater Master Plan (which also looked at flood hazard areas as part of a system that included the riparian corridor, wetlands, and vegetated areas).

Regarding Fences and Walls in the table in 4.5-1 (Attachment 371 in the staff report), Commissioner Howell highlighted the middle column for fences and walls in floodways. It seems as if little is allowed in floodways except what is permitted under Section 4.5.80.01. It doesn't seem to matter much what kind of fence it is. He said that "B" was the most descriptive. He asked whether that would apply to a line under a floodway; otherwise people might mistakenly be given the idea that they could engineer something. Planner Potter replied that the section states that no encroachments are allowed within the 0.2-foot floodway with the exception of bridges, infrastructure, utilities, or water-dependent uses for which it may be demonstrated through hydrologic analysis done by an engineer, etc., that the proposal essentially would not cause a problem.

Planner Potter said the language primarily just impacts City properties or facilities, though it is conceivable that there could be private bridges. If the City were trying to build a fence around a water intake, the type of fences that would be allowed in those limited circumstances would be Types A and B, an open barb or barbless wire fence no more than one horizontal strand per one foot of height (fairly open). The second kind is open pipe or rail fencing that occupies no more than 10% of the fence area; that is fairly open. You would still have to meet the exceptions. Commissioner Howell said the language should not frustrate people who think they've found an opening. Planner Potter agreed, saying that Section 4.5.80.01 also stipulates "no rise in base flood elevation"; she suggested clarifying language to meet Commissioner Howell's concerns by dittoing what is stated in floodway Column A and B for the third and fourth rows as well.

Commissioner Howell said in regards to the lead-in statement to Section 2.11.40, the section that lists activities that are exempt from the need for a floodplain development permit (page A-192), he suggested adding "may be prohibited as per Chapter 4.5 Floodplain Provisions or Chapter 4.13 Riparian Corridor and Wetland Provisions" to help guide people to learn where they could not do an activity. Planner Potter replied that it was a good idea.

Commissioner Howell said the one area not precisely protected is the partially protected floodway fringe, except it is not clearly allowed either; the only part that he could see that applied was the accessory structures less than 200 square feet (page A-367, Section 4.5.110.07.b related to residential construction). He said there were many situations in which fences have been considered accessory structures for other rules; this language seems to require engineering for all fences. Planner Potter replied that Section 4.5.110.07.b only applies if you're proposing new construction in terms of actual buildings and structures less than 200 sq. feet; it would be difficult to apply the standards in Section 4.5.110.07.b to fences and walls. Planner Potter said that Section 4.5.110.07 is in the overall construction standards section of 4.5.110; Section 4.5.110 states how construction must occur for activities that are allowed by Section 4.5.100. In terms of determining whether a fence or wall could be allowed, applicants would go back to partial protection base standards in Section 4.5.100. In Section 4.5.110 – the construction standards, there is a separate section for fences and walls and it is Section 4.5.110.12. Section 4.5.110.12 clarifies that Section 2.11.40 addresses fences and walls that are exempt from the need for compliance with

Section 4.5.110.12. Because both Section 4.5.110.07 (regarding accessory structures) and Section 4.5.110.12 (regarding fences and walls) are both subsections of the same parent construction standard section of 4.5.110, she thought it would be evident that Section 4.5.110.07.b was not intended to apply to fences and walls.

Commissioner Howell said the problem with standards for Partial Protection is that they don't clearly state whether fences are either allowed or not; they currently only address volumetric exchange and parking limitations. He asked if everything else was allowed if not stated otherwise. Planner Potter replied that a wide gamut of activities are allowed in Partial Protection areas, provided applicants can meet the performance standards in the construction and development standards. Planner Potter highlighted the top two paragraphs for the partial protection standards in Section 4.5.100 – Standards in Partial Protection Floodway Fringe Areas (page A-361). The first sentence reads, *"The following standards shall apply to activities and development in Partial Protection Floodway Fringe areas as identified in the Natural Hazards Map."* She said that the activities and development will be regulated by the underlying zone and secondly by the listed performance standards in Section 4.5.100. The introduction to that section continues, *"In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within the Partial Protection Floodway Fringe. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply…"* As part of this proposed Text Amendment, a new sentence is added after the second lead-in paragraph. That sentence reads, "Except as provided in Sections 4.5.100.01 and 2.11.40, the placement of fill is prohibited within Partial Protection Floodway Fringe areas." Those exception sections include the volumetric exchange sub-section which is Section 4.5.100.01. Subsection 4.5.100.02 pertains to parking limitations; and the third subsection (Section 4.5.100.03 on page A-363) is critical, because it cites that compliance is also required with a number of other Code sections and those other Code sections are listed with cross-references. The cross-referenced sections include the mandatory construction standards in Section 4.5.110, etc. You are allowed to do any activity or development in the Partial Protection Floodway Fringe area, provided the underlying zone allows it, and provided you meet all these performance standards.

Commissioner Howell asked if, in Section 4.5.110.07.b, the term "Accessory Structures" applied to fences in terms of construction standards; Planner Potter replied that it didn't in this context; fences and walls have their own provisions in Section 4.5.110.12. Commissioner Howell replied that the term "Accessory Structures" is used in other parts of the Code in a manner that includes fences and walls; they seemed to be included in one place in the Code but not another. It is not that they are not allowed by Section 4.5.110.07.b; it's just that they have to meet engineering standards. It is common to call fences and walls structures. Planner Potter said that Section 4.5.110.07.b could be clarified to state that the provision does not apply to fences and walls and that fences and walls in this context are addressed by Section 4.5.110.12. However, she thought that this point would be self-evident as one reads through Section 4.5.110.07.b. She added that perhaps a simple cross-reference would help. Commissioner Howell noted that often people are surprised when things are considered structures. Planning Division Manager Young suggested simply inserting a parenthetical, such as "Standards for fences and walls are contained in 4.5.110.12."

Commissioner Howell stated that, regarding volumetric exchange, during the Natural Features Project and the Stormwater Master Plan Project there was a lot of time spent

balancing development and natural features, and determining where volumetric exchange should or should not be allowed. This proposed Text Amendment recommendation makes a strong deviation from that process by allowing volumetric exchange in smaller stream areas. It was very clear in both processes that the choice was consciously made to require flow-through design in the smaller stream systems because of the type of hydrology there. When garages were discussed during that process, it was believed that since they were not habitable, people could put them at grade and just take responsibility for elevating stored items. He agreed that the issue of habitation should be dealt with proactively; also, that it is harder to incorporate flow-through design in commercial and industrial structures. These issues should be able to be accommodated with the previous balancing.

Commissioner Howell asked why flow-through design isn't fairly practical for situations involving residential non-garage areas, where people often have crawl space beneath and where the finished floor is typically required to be above the base flood elevation. It was thought that over time, as people redevelop and rebuild, more and more residential structures would become flow-through in problem areas that probably should not have been developed in the first place. Also, flow-through design would make people buying property aware that a property was in the floodplain; property buyers should check on whether or not they will need a raft.

Commissioner Howell said he wasn't clear on the need for an alternative to flow-through design for habitable structures; Planner Potter said that many people will indeed want to take advantage of flow-through design if they can do so, since it will really help them with flood insurance costs. In many cases, if the existing home already has a crawlspace below, they can incorporate additional venting, etc. and other techniques to reduce flood risk and flood insurance costs. She said staff didn't anticipate wholesale use of volumetric exchange for additions and other construction; the idea was just to create the possibility for people to use it in unique circumstances; it was thought that the overall expansion of the ability for people to use the volumetric exchange tool would cause negligible impacts. It is, however, a very valuable tool for properties where the grade change needed to achieve the required finished floor elevation is so small, that raising it to do the flow-through design would raise it a good deal higher than needed to meet a finished floor elevation of one foot above base flood elevation. The expansion of the ability to use the volumetric exchange tool seeks to accommodate owners of flatter lots that are only slightly below base flood elevation, where there is not a large grade differential needed to achieve a finished floor elevation of one foot above base flood elevation. Other examples could be construction of an addition or construction of patios or walkways and trying to connect those to a habitable building; volumetric exchange could be useful for providing additional flexibility for such transitional areas. She didn't anticipate wholesale use of the tool, since most property owners would probably use flow-through design for such construction as a bedroom addition, for example.

Floodplain Manager Lisa Franklin added that the current Code requires that substantial improvement projects (a substantial improvement is valued at more than 50% of the value of a home) and new residential construction projects require the home itself to have flow-through design. Regarding the issue of non-habitable spaces at grade, in order to elevate them and have flow-through design under them, you have to elevate the driveway. She noted that in her experience in the building permit office, there were a lot of illegal conversions of garages and non-habitable spaces, creating life-endangering situations. It would be desirable to avoid that by allowing minimal changes to a lot; most of the time, six inches of elevation difference are all that is required.

Commissioner Howell asked if the wording of Section 4.5.110.07.a (pages A-366 & A-367) that talks of having a lowest floor elevated to a minimum of one foot above base flood elevation meant that it could be either on fill or use flow-through design; Floodplain Manager Franklin said that was true. However, Section 4.5.100.01 clarifies where volumetric exchange is allowed. Commissioner Howell said the language met the intent of the past balancing efforts, but suggested clarifying the language with reference to "habitable areas." He suggested the Code allow access transition areas (driveways and garages) to use volumetric exchange.

Commissioner Howell asked about new standards still requiring flow-through design for new construction and substantial improvements; Planner Potter replied that what is being required is one foot above base flood elevation; that could be achieved in a number of ways. There is already volumetric exchange in certain parts of the community; it is proposed for other areas that already have a number of residences. You'd have to be doing volumetric exchange on site; you couldn't bring fill to the site in order to raise a portion of a structure. In these areas, most are residentially zoned; there may be commercial structures and churches that find it more challenging to achieve flow-through design everywhere.

Commissioner Howell summarized that in small stream partially protected floodway fringe areas, he thinks it appropriate to require all flow-through design. The exceptions where he finds that volumetric exchange could be an appropriate option include nonresidential development, garages, driveways, and some access ways. It seems that if we approve the Text Amendment's broader expansion of the ability to use the volumetric exchange tool, we're abandoning the flow-through design requirement in order to accommodate additional exceptions when we don't need to do so. In terms of being consistent with the past balancing efforts, adding a convenient tool for property owners was ruled out. There is a strong reason in all areas to not do volumetric exchange, but it was accommodated in certain areas because of the type of flow those areas had. Commissioner Howell said the City would be rewriting the past balancing efforts if it allowed wholesale volumetric exchange in small stream areas. Exempting problem situations is one thing, but wholesale allowing it doesn't seem consistent with the previous balancing process. Planner Potter replied that staff's view was that it was not a wholesale change; staff analyzed maps thoroughly to see where the additional areas of partial protection floodway fringe were located. Most of the center of Dixon Creek and the other small streams in partially protected floodplains are all protected by floodways. There are small smatterings of partial protection floodway fringe areas along those streams, outside the floodways. Were the ability to use volumetric exchange provided to these property owners, there would still be incentives on most of the habitable construction to choose flow-through design (such as reduced flood insurance costs, etc.). Additionally, not all sites would be able to meet the required performance standards for volumetric exchange. Therefore, staff doesn't believe there would be wholesale use of the tool.

Commissioner Howell said that it was his understanding that flood insurance applied community-wide and not to individual properties in terms of what design they chose; Planner Potter replied that community-wide, there is a 10% discount. However, the actual insurance rate for an individual site is determined by whatever flood insurer the property owner one ends up with; the actual flood insurance that one pays is determined by specific circumstances of each site and who is calculating it. Commissioner Howell noted that a person with flow-through design seems no less at risk; it has a community and

neighborhood impact; either way, they're above the flood level. Planner Potter responded that this point was true, but that a flow-through design could accommodate venting, etc. in the crawl space and those types of features improve overall flood protection and that is generally reflected in the ultimate flood insurance rate.

Commissioner Howell said that the Public Works Urban Stream Maintenance Guidelines were the result (around 1993) of a citizens group seeking more protection for streams and seeking to try to rein in Public Works mowing down stream vegetation along Dixon Creek. These internal guidelines have evolved since then. However, they are not a good model unless they become a technical document. He said he was concerned about the Text Amendment's addition of them to the list of allowed/exempt activities (such as in Section 4.5.80.03). He said he would prefer that if there are allowed activities missing that Public Works would like to add, we could consider an addition. One such item could be regarding removal of non-vegetative debris. Commissioner Howell said one thing that is different between the Guidelines and the current Code requirements is that the vegetation removal piece in the Guidelines is more expansive than the one that is already in the exceptions section of the Code's riparian provisions (Section 4.13.50.a); he said he is concerned because he believes that it is appropriate to limit vegetation removal to that vegetation which, if not removed, would cause flooding that would damage structures. However, language in the Guidelines implies that any vegetation can be removed if it would impede stream flow; this gives license to cut down any vegetation in the stream; this is not consistent with what has evolved since the Guidelines were first written. He asked what was missing that staff sought to address as an exception.

Planner Potter replied that there wasn't anything necessarily missing, but it was an attempt to give people an idea of what Public Works does use; the activities covered by the Guidelines are always in the context of the current Code. The original adoption of the Guidelines was in the early 1990's, prior to the Natural Features project. They need to be updated over time; that is why the Guidelines must always be implemented in the context of the current Code requirements, such as those in Chapter 4.13 – Riparian Corridor and Wetland Provisions. The Public Works Department developed both the Stormwater Master Plan and the Salmon Response Plan and was involved in the Natural Features Project, which dovetailed all of these planning efforts into the development of the Code provisions. Adding a reference in the Code to the Guidelines is an attempt to provide the public with a document that is used in the context of other Riparian Corridor requirements. There is nothing that is missing; if the Commission wishes, reference to the Guidelines can be removed.

Engineering Supervisor McConnell added that the real goal of including a Code reference to the Guidelines is to make more people aware that the document exists; typically, staff hears at least annually from citizens expressing concerns that the City is either doing too much stream maintenance or not enough. This Code reference would help the public know that this document exists; even though it is posted on the City's website, not many people seem to be aware of it. He said the reference to the Guidelines could be removed from the Text Amendment if the Commission wishes. Commissioner Howell suggested that the Code reference could be re-phrased to make it clear that the activities in the Guidelines were only allowed to the extent they were consistent with all the natural features provisions of the Code, especially those provisions in Chapter 4.13 – Riparian Corridors and Wetlands provisions. The guidelines work both ways; they help Public Works staff know what they are allowed to do and they help citizens know what the limitations are; frequently citizens ask for

more manicuring along banks (how they imagine the best flood control is done). Having the right language helps Public Works staff defend themselves. He said his main concern was that the activities in the Guidelines be consistent with other parts of the Code. Otherwise, a Council under pressure from a citizens group could make a change to the Guidelines without even considering the Code. As maintenance guidelines, they could do that without even consulting Community Development. He suggested simply inserting language that the Guidelines activities must be consistent with other natural features sections of the Code; Planner Potter suggested adding such catch-all cross references in each of several areas that mention the Guidelines.

Commissioner Hann said that if there was confusion over structures versus fences, he suggested putting Fences and Walls in the definitions section; Planner Potter addressed the difficulties with pursuing that course of action. She said there is already a definition of Accessory Structure in Chapter 1.6 - Definitions. However, sometimes fences and walls are meant to be called accessory structures (such as in the context of Chapter 4.3 – Accessory Development) and striking fences and walls from the definition of accessory structure would require changing other Code chapters to insert “fences or walls” in all areas where the term “accessory structures” is used and intended to include fences and walls; such an analysis of the entire Code’s use of the term “accessory structures” would take quite an effort and cannot be accommodated as part of this Text Amendment. Planning Division Manager Young added that a definition of “structure” would have a huge ripple effect in the Code as well. Deputy City Attorney David Coulombe added that in construing the text of the Code, the specific definition will prevail over the general definition of structure. In a particular chapter, that definition will vary according to context. Changing a general definition for a minor issue creates an overall problem.

Commissioner Howell said that his issue he raised regarding Section 4.5.110.07.b and the term “accessory buildings and structures less than 200 square feet” would be resolved; staff seemed to be suggesting adding a parenthetical phrase something like, “this provision does not pertain to fences and walls, which are covered by Section 4.5.110.12.” Planning Division Manager Young agreed that was correct.

Commissioner Hann moved to recommend to the City Council approval of the LDC Text Amendment LDT10-00001, as presented in the January 21, 2011, staff report, as well as Commission findings and support; and, if agreeable, he asked for incorporation of the additional staff recommendations in Section III of the February 15, 2011, supplemental staff memo from Senior Planner Kelly Potter to the Commission; motion seconded by Commissioner Howell.

Commissioner Howell asked whether staff was amenable to the changes discussed to Table 4.5 – 1 in Section 4.5.110.12; the clarification to the lead-in paragraph in Section 2.11.40 to add the cross-reference to Chapter 4.13; and the clarification in Chapter 4.5 where the Urban Stream Maintenance Guidelines had been inserted so that it was clear that the activities in the Guidelines were allowed only to the extent they were consistent with the Code’s natural features provisions; he asked how best to address those issues. Planner Potter suggested the Commission give general direction on some of them and that would be sufficient. She said if we got into very substantive, complex matters, precise Code language would need to be developed by staff and reviewed by the Commission. However, these changes mentioned by Commissioner Howell are fairly simple and general Commission guidance for those matters would be fine.

Planner Potter summarized the Commission changes to the Text Amendment thus far as including:

- The staff-recommended changes that Commissioner Hann included in his motion; those in Section III of the February 15, 2011, supplemental staff memo to the Planning Commission.

- The correction of the typographical error that Chair Gervais had raised in Section 4.5.110.12.a.2 (page A-370); the last paragraph of that section has a reference to Section 2.11.40.b.2 and that section does not exist. The cross reference needs to be changed to cite Section 4.5.110.12.b.

- The insertion of text into the lead-in paragraph of Section 2.11.40 (page A-192); the second line would be amended to include a cross-reference to Chapter 4.13 - Riparian Corridor and Wetland Provisions and any other appropriate Natural Features Code provisions.

- The insertion of text into all the areas where the Urban Stream Maintenance Guidelines are mentioned (such as the one in Section 4.5.90.01.i on page A-356), so that it is understood that maintenance conducted according to these guidelines must also be done consistent with and in the context of the provisions in Chapter 4.13 - Riparian Corridor and Wetland Provisions and other applicable Natural Features Code provisions.

- The insertion of a parenthetical phrase into Section 4.5.110.07.b (page A-367) to state that fences and walls are not governed by this Section, but are governed by the standards in Section 4.5.110.12.

- The modification of text in Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit (page A-371) to change the Floodway fencing text in the row for fencing types C & D and in the row for fencing types E & F. Delete the currently proposed text and replace it with the same text that is used for Floodway fencing in the row for fencing type B.

Commissioner Howell moved to amend the main motion to incorporate direction to staff to develop language in the areas just cited; Commissioner Hann seconded; motion **passed** unanimously.

Commissioner Howell said he had a problem with the extent to which volumetric exchange was being expanded, but he believed there was a good case to do it in the small stream sections for nonresidential development, for garages and driveways, and with some definition of access ways and other entrances, but not to introduce it for habitable areas. Community-wide, it is not a huge number of properties, but it has an impact on a stream course length. Many of the homes along streams such as Dixon Creek are the properties that have had problems during flood events and where development patterns easily create additional problems for neighboring properties. Also, these are the properties for which it is difficult to do volumetric exchange effectively; it is not a big burden for those people (apart from the highlighted exemptions) to do flow-through design. Commissioner Howell said that he is not convinced that people would be persuaded by the benefits of flow-though design just because of their insurance rate; a developer of an infill property may not care about

ongoing costs of flood insurance and will simply use the easiest design. He is concerned with losing a tool to solve problems with areas that were inappropriately developed.

Chair Gervais said she isn't convinced that the problem is as big as Commissioner Howell portrays it. She asked whether the Commission wanted more time to consider it. Commissioner Hann asked staff to give an example of how volumetric exchange could be used versus flow-through design.

Planner Potter gave a theoretical example of a house on a cul-de-sac that backs up to Dixon Creek; the lot is very flat until the very back of the lot, where it then steeply slopes into Dixon Creek. The scenario is that the homeowner wants to add a bedroom in the back yard and the existing grade of that part of the lot is only six inches shy of the finished floor elevation that is required by Code. The Code-required finished floor elevation needs to be one foot above base flood elevation. Therefore, the homeowner only needs to construct the finished floor six inches above the existing grade of the lot. Six inches is not enough height for a crawlspace, so to get adequate crawlspace for flow-through design, the finished floor of the new bedroom would be significantly higher than the Code-required one foot above base flood elevation. The bedroom would end up being substantially higher than the main house. However, there is not a need to do that if the property owner can use volumetric exchange and balance cut and fill by slightly re-grading the back yard and bringing over six inches of fill to the part of the backyard where the new bedroom is planned. Volumetric exchange would allow the finished floor elevation of the new bedroom to be more in line with the existing house and also meet the Code-required one foot above base flood elevation. Commissioner Hann asked what the height increase between the existing house and the new bedroom would be if the homeowner opted for flow-through design rather than a slab-on-grade approach; after conferring with Floodplain Manager Franklin, Planner Potter replied that it depended on the precise grade change, but would likely be a couple steps from the main house up into the new bedroom.

Commissioner Hann asked what protections the adjoining neighbors had against suffering from the six inches of fill; Planner Potter replied that you'd need to ensure (as one does with all new construction) that the drainage was designed to go to the street and not onto the neighbors' properties. You want to maintain existing drainage patterns; a drainpipe may need to be added to redirect rain coming off the new addition. Commissioner Hann asked if this scenario only applied to residential development; Planner Potter replied that it applied to partial protection floodway fringe areas, regardless of the zone. However, the additional partial protection floodway fringe areas only include a small number of commercial properties, such as those on 9th Street between Conifer and Elks. Commissioner Hann asked if a church wanting to expand could use volumetric exchange; Planner Potter replied it could, as the Text Amendment is currently proposed, if all the volumetric exchange performance standards were met.

Planning Division Manager Young added that, in terms of neighbor impacts, the volumetric exchange performance standards require no rise in base flood elevation; it is a bathtub model, in that you're adding volume into a different part of the flood plain, but also taking a compensating amount out, so there shouldn't be a rise in the base flood elevation. He said the drainage concerns that Commissioner Hann and Planner Potter described have more to do with the issues that would arise from floodwater flow.

Commissioner Howell asked about a theoretical house on a foundation in the floodplain, on flat land along Dixon Creek, but across the street from the theoretical house that Planner Potter described. Given that this second theoretical house currently displaces water during a flood, he asked how that property owner could redevelop his/her property in the future with a non-flow-through foundation, which would be considered fill. Planner Potter replied that the property owner could only use such a non-flow-through design if they used the volumetric exchange tool and he/she could only use the volumetric exchange tool if all the volumetric exchange performance standards could be met. One of those performance standards prohibits ponding, so that property owner could not simply dig a hole and place fill from the hole under the new structure.

Commissioner Howell asked Planner Potter what would happen to the house example she cited when it came time for it to get rebuilt in the future; he said that since that property owner could build the whole new residence with flow-through design, there was no need to use volumetric exchange to resolve a problem such as that created when a homeowner is only adding an addition to a home and is trying to get the finished floor elevation of the addition to match or be close to the finished floor elevation of the existing home. The proposed standards to allow volumetric exchange in all partial protection floodway fringe areas wouldn't directly promote flow-through design in the case of a complete redevelopment that resulted in a new home. If the property owner was going to live in it, he/she might think about the rate of flood insurance, but he didn't believe that the flood insurance rate incentive was enough to ensure flow-through design. There are distinctions between new construction and substantial improvements. In terms of residential development, he believes that it is enough to allow volumetric exchange for modifications up to but not including substantial improvements (which are much bigger than adding a single bedroom).

Planner Potter replied that this suggestion is one approach and that the Commission could give staff such direction on this issue. Commissioner Howell suggested only intruding as much into the previous balancing process as needed (with new residential construction) in order to solve problems. Floodplain Manager Franklin said she handles floodplain development for the Development Services Division; she comes across concerns with the current Land Development Code restrictions on volumetric exchange and provided Text Amendment input from a permitting standpoint to Planner Potter.

In discussing volumetric exchange as a tool, Floodplain Manager Franklin gave the real life example of a small lot on a street across from the Market of Choice. The property owner recently submitted building permits to construct a new home in place of a demolished single family home. The base flood elevation for this lot is one inch above grade; you can't do flow-through design, but there is no other option under the current Code because volumetric exchange is limited to partial protection floodway fringe areas in the floodplains of the Willamette and Marys Rivers and the Mill Race. While this lot is in a partial protection floodway fringe area, it is not within the floodplains of the Willamette and Marys Rivers or the Mill Race. The lowest floor that is habitable needs to be one foot above base flood elevation, so that needs to be thirteen inches from grade for this lot. However, the flow-through design only counts between the base flood elevation and the ground (which, in this case, is only one inch), so you can't do flow-through design that meets FEMA requirements and the property owner can't do fill. If the property owner was allowed to use the volumetric exchange tool, he/she could slightly grade at the rear of the long lot to account for that one inch by 1500 square feet (the building footprint) in order to build the new home. There are

areas six inches below base flood elevation where people don't have the capacity on the property to move soil from one area to another to elevate the full six inches and still comply with the Code. Therefore, the performance standards for volumetric exchange would not be able to be used in all cases. It would just be a good solution for this particular lot.

Floodplain Manager Franklin continued by reiterating the volumetric exchange performance standards in the proposed Section 4.5.100.01; it is clear that you are not to create barriers to the flow of floodwater by creating ponding or impacting neighbors with drainage. These requirements are consistent with Oregon drainage law which prohibits you from doing things on your property that cause drainage flow onto your neighbor's property in a manner that exceeds naturally occurring drainage. Oregon drainage law has been taken into account and put into the Code. Someone can't just do volumetric exchange by bringing in a pile of soil and putting a house on top of it; there are many guidelines that prohibit that.

Commissioner Hann highlighted a letter from Izzy's Pizza; if the property is redeveloped, he asked if volumetric exchange was taken away as an option, whether flow-through design is really the only thing that could be done in that situation, tying the hands of people who have significantly invested in a property. Planner Potter replied that it does limit them. If Izzy's, for example, is on a commercially-zoned property, under FEMA and these proposed standards, they do have the option of doing flood proofing. Flow-through design would add to the cost of replacing the building. Commissioner Hann asked how to flood-proof an entrance door to a commercial establishment; Floodplain Manager Franklin replied that she has not seen a commercial development in the floodplain during her three years here. There is a technical bulletin from FEMA regarding doing commercial development in the floodplain and she anticipated that she would learn the standards when the application came in. She expected it would involve using flood proof materials, though she didn't know how to completely waterproof a building against floodwaters, so she anticipated that water would get in the building during a flood event. Flood insurance covers the structure and items inside.

Commissioner Hann said he is not in favor of removing the expanded volumetric exchange provisions that are shown in the proposed Text Amendment; it is a tool that gives some discretion to property owners to address difficult redevelopment issues the property owners contemplate future development. Therefore, he suggests letting the expanded volumetric exchange provisions stand as shown in the proposed Text Amendment. Commissioner Howell said his objection was that the Text Amendment involves taking the exceptional circumstance situations and, in order to solve them, changing the volumetric exchange provisions for all situations and not just the ones that are the exceptional circumstance ones. He said that violates the previous balancing efforts that were done, and he said he would have to vote against this Text Amendment if this aspect of it were not modified.

Chair Gervais asked what process was available for the lot across from the Market of Choice if the City doesn't give the owner the option in the Text Amendment to use either volumetric exchange or a flow-through design; the current Code provisions leave the property owner stuck with a flow-through design option only. She asked what process was available to the property owner. Planner Potter surmised that the property owner might be able to use the Planned Development process which would involve a public hearing to construct the single family home.

Commissioner Howell said he didn't object to expanding the volumetric exchange tool to all partial protection floodway fringe areas for garages or access ways, for people that can't do

flow-through design because they only have “x” number of inches between the base flood elevation and the natural grade of the lot, for nonresidential development, and for residential improvements that do not exceed the federal definition for substantial improvement. He does not support the expansion of the volumetric exchange tool for situations involving a substantial improvement or new construction. He said he objected to expanding volumetric exchange to situations that are not exceptional circumstances; there was a lot of community process essentially saying that, over time, if you are going to build in the floodplain, you are going to have to do it differently. He said he was fine with the exceptions he outlined.

Commissioner Hann expressed support for these ideas, provided they included the specific situation where a property owner could not use a flow-through design to meet the required finished floor elevation of one foot above base flood level criteria, because of the natural grade of the lot.

Planner Potter suggested the Commission consider a list of parameters within which it could consider volumetric exchange on partial protection floodway fringe areas outside the floodplains of the Willamette and Marys Rivers and the Millrace. She suggested that staff could craft general guidelines that outline the Commission’s direction for Text Amendment modifications to the volumetric exchange provisions. She said Section 4.5.100.01 could be modified to create a new “a” and re-letter the existing subsections in Sections 4.5.100.01.a-e, accordingly. The new “a” could then be used to describe the precise circumstances under which volumetric exchange could be used. Those circumstances would include:

- the currently allowed areas that are in the floodway fringe portions of the Willamette and Marys River and Mill Race floodplains; and

- partial protection floodway fringe areas along other local streams, provided one of the following is true:

    - The development is nonresidential construction;
    - The development is residential construction and is less than a substantial improvement;
    - The development is residential construction on a site where natural grade is such that, to achieve a finished floor elevation of one foot above base flood elevation, flow-through design will not result in a crawlspace consistent with FEMA standards,
    - The development is a garage, or
    - The development is a driveway or building access.

Commissioner Howell concurred with the proposal.

Deputy City Attorney Coulombe suggested a motion to amend the main motion in order to adopt these proposed changes. Commissioner Howell moved to replace current limitations on volumetric exchange with the list just generated by staff. Planner Potter reiterated that this clarification would be a new “a” for Section 4.5.100.01 so that it was up front and center. Commissioner Howell asked if the Commission should simply give staff general direction; Planner Potter said staff was comfortable with general direction, but she requested that staff be given a few minutes now to craft text that was a bit more precise for the Commission’s motion. Commissioner Howell asked if staff could craft a motion for general direction. Planner Potter confirmed that she could and the Chair Gervais directed the Commission to take a break for a few minutes to allow staff to work on the guidance language.

Planner Potter crafted language to be used as general Commission direction to staff to modify the Text Amendment provisions regarding volumetric exchange. She directed the Commission to page A-361, Section 4.5.100.01 Volumetric Exchange. She said that in the proposed Text Amendment, the volumetric exchange performance standards are contained in subsection letters "a" through "e." She suggested the Commission would move to modify Section 4.5.100.01 to create a new "a" and re-letter the existing "a" through "e" sections accordingly. The new section "a" shall state that volumetric exchange shall be limited to the following areas: 1) the Floodway Fringe portions of the Willamette River, Mary's River and Millrace Floodplains; and 2), the Floodway Fringe portions of other local streams, provided the area is designated as Partial Protection on the Natural Hazards Map and at least one of the following is true:

a. The development is nonresidential construction;

b. The development is residential construction and the development is less than a substantial improvement;

c. The development is residential construction and on a site where the natural grade is such that, to achieve a finished floor elevation of one foot above base flood elevation, flow-through design will not result in a crawlspace consistent with FEMA standards;

d. Development involves a garage; or

e. The development involves a driveway.

Planner Potter asked if the Commission wanted to also include building accesses, such stairs and other access points, listed along with "e," the driveway provision. Commissioner Howell asked if those would be considered less than substantial improvements. Planner Potter said yes and the Commission directed staff to add "building access" to "e." Planner Potter asked Chair Gervais if it was understood that her wording was intended to be general guidance and that staff would need to develop and wordsmith the actual text used to modify the Text Amendment. She said that this was particularly true of "c." Chair Gervais confirmed that the Commission's intent was to give staff direction rather than specific language.

Commissioner Howell moved to incorporate language as proposed by staff, including the addition of "building access" to "e." Commissioner Hann seconded the motion and it **passed** unanimously.

In the main motion, four voted in favor (Commissioners Howell, Feldmann, Hann and Ridlington), with Commissioner Woodside in abstention. Motion **passed**.

III. PLANNING COMMISSION MINUTES:

A. January 5, 2011:

Chair Gervais stated that the second sentence in the second paragraph on page five should read, "Trees could not get to a height where they would adequately screen the site". The third sentence in the fourth paragraph on page six should have the

superfluous word “out” deleted. The first sentence in the third paragraph on page 12 should be modified to read, “..impacts will overshadow land use decisions”. Commissioner Hann moved and Commissioner Feldmann seconded to approve the minutes as corrected; motion **passed**.

B. January 19, 2011:

Commissioner Howell moved and Commissioner Feldmann seconded to approve the minutes as presented; motion **passed**.

IV. OLD BUSINESS:

Discussion on when to choose a Liaison to the Housing and Community Development Commission.

V. NEW BUSINESS:

A. Planning Manager’s Update

Planning Division Manager Kevin Young highlighted an email today regarding an optional March 16 meeting for members of all boards and commissions regarding state rules for elections for Board and Commission members. Under State law, Commission members are considered public employees for purposes of the campaign; there are certain rules. He said Commissioners had to be careful of what they said regarding advocacy of the levy on the May ballot. There is heightened sensitivity when the campaign starts; Councilor Traber said his understanding is that period starts March 7. Chair Gervais suggested sending out an overview of the information to the many members whose work obligations prevented them from attending; Planning Division Manager Young agreed to do so.

Planning Division Manager Young related that Commissioner Reese had had to resign, citing work conflicts; this will create quorum issues. Commissioner Woodside related that her baby’s due date is June 6; she plans to remain on the Commission.

Planning Division Manager Young related that the Budget Commission met last week and its general direction to the City Manager was to prepare a balanced budget, without specifying particular budget items for elimination or inclusion. The Planning Division interprets that as good news. The previously seen package prepared by the City Manager assumes the department will be reduced at least to the extent of Package 1. It is a given that with Package 1 there will be cuts, and there may be further cuts, depending on projected budget shortfalls or other factors.

Planner Division Manager Young noted that City staff were saddened by the announcement of the City Manager’s decision to retire; he will be missed. Effective date is June 30.

Commissioner Hann asked if Friends of Witham Oaks were successful in purchasing the Witham Oaks project site, with its approved development plan, and if they did any development at all, would they be required to put the road through. Planning Division Manager Young said that with the approvals in place for the site (a subdivision and a

planned development), the way they are structured is that with Phase I development, the entirety of the Circle Boulevard extension would need to be constructed. Commissioner Hann asked if the group was aware of that; Planning Division Manager Young replied that it was his belief that the group had no plans to go forward with development of any approvals.

Planning Division Manager Young said that with no progress, those approvals would lapse this summer and the land will end up with a Planned Development overlay on it. If the owner wanted to move forward with anything that would be considered development, planned development approval would be required. No one is willing to say with certainty whether the Circle Boulevard extension would be required in conjunction with whatever that development would be. Councilor Traber asked what would be considered development; Planning Division Manager Young replied that it would be a very low threshold; it could be as little as a garden shed.

VI. <u>ADJOURNMENT</u>: The meeting was adjourned at 9:20 p.m.

MEMORANDUM

From: Kelly Potter, Senior Planner

To: Planning Commission

Date: February 15, 2011

Re: Planning Commissioner and Public Testimony Issues Raised for the FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

I. ISSUE

Several issues were raised during the February 2, 2011, Planning Commission public hearing for the FEMA Update Project Legislative amendment to the Land Development Code (LDT10-00001). This memo discusses and provides a staff recommendation for each of those issues, so that the Planning Commission may use the information during its deliberations.

II. BACKGROUND/DISCUSSION

It is important to note that the existing Land Development Code requirements for Floodplains, Riparian Corridors, Wetlands, Landslide Hazard and Hillside Development, and Significant Vegetation were developed through an extensive public process during the Natural Features Project (2000-2004). This package of Code provisions represents a balance between protection of Natural Hazards and Natural Resources and economic development and housing opportunities. The Code changes proposed as part of this Legislative Amendment to the Land Development Code are in direct response to a mandate by the Federal Emergency Management Agency (FEMA) and will result in an increase in restrictions in the 100-year Floodplain. An entirely new Floodplain Development Permit program is being introduced, along with numerous new development standards. To the extent that Staff could work these FEMA-mandated requirements into the existing package of Natural Hazard and Natural Resource development standards, Staff did so. To the extent Staff could introduce some flexibility for property owners, while still complying with the FEMA-mandated requirements and the intent of the balanced Natural Features Program, Staff also did so. The proposed Legislative Amendment to the Land Development Code does not revisit balancing that occurred through the Natural Features Project, and does not further restrict development unless directly mandated to do so by the FEMA-mandated revisions.

<u>Public Works Urban Stream Maintenance Guidelines</u> -

<u>Concern Raised</u>: The concern raised is that these guidelines *"do not seem fully consistent with protecting the properly functioning conditions of streams, and go beyond limitations in the current*

LDC (removal of vegetation likely to cause flooding events resulting in structural damage)." A second aspect of this concern is that *"since these guidelines can be modified by staff without review for consistency with policy,"* the person raising the concern was *"not comfortable including them unless there is specific language requiring the Guidelines to be consistent with the policy documents.*"

Discussion: Part of the issue raised is that there is a concern regarding two of the activities listed as exempt from the need to obtain a Floodplain Development Permit. There is a fear that these two activities, outlined in Sections 2.11.40.g&h, would somehow circumvent the Code's protections for the 0.2-ft Floodway and any associated protected Riparian Corridor. The two exemption sections in question are as follows:

> **2.11.40.g** **Removal of vegetation activities, provided they are consistent with Section 4.5.80.03.a; and**
>
> **2.11.40.h** **Landscape maintenance activities, provided they are consistent with Section 4.5.80.03.b.**

However, just like any other Code provision, these Code provisions are implemented in the context of other Code provisions. To emphasize this point, the lead-in for Section 2.11.40 states:

> **2.11.40 - EXEMPTIONS**
>
> **If allowed by other applicable chapters in this Code (floodplain development may be prohibited per Chapter 4.5 - Floodplain Provisions - Floodplain Provisions, or other restrictions may apply), the following types of Development are exempt from the Floodplain Development Permit process: *[De minimus thresholds developed by Corvallis staff in coordination with FEMA/DLCD]*** (emphasis added)

Removal of vegetation and landscape maintenance activities are governed by Sections 4.5.80.03.a&b for 0.2-ft. Floodway areas and Section 4.13.50.a for both Highly Protected Riparian Corridor Areas and Partially Riparian Corridor areas (which, practically speaking, are the streams plus the first 25-ft. from Top-of-bank on both sides of streams). No changes to Section 4.13.50.a are proposed as part of this Legislative Amendment to the Land Development Code. Thus, for areas where there are protected Riparian Corridors (which "cover" the areas in the 0.2-ft. Floodway), activities allowed within the 0.2-ft. Floodway via Sections 4.5.80.03.a&b are only allowed in the context of the Riparian Corridor provisions of 4.13.50.a. The City of Corvallis, Public Works, Urban Stream Maintenance Guidelines have been introduced as allowed activities in the 0.2-ft. Floodway via Sections 4.5.80.03.a(8)&b(7). However, as mentioned, no changes to Section 4.13.50.a are proposed as part of this Legislative Amendment to the Land Development Code. Thus, any activities allowed within the 0.2-ft. Floodway via Sections 4.5.80.03.a&b are only allowed in the context of the Riparian Corridor provisions of 4.13.50.a.

A Staff review of the City of Corvallis, Public Works, Urban Stream Maintenance Guidelines did not reveal activities that were inconsistent with the Riparian Corridor provisions in Section 4.13.50.a. The activities noted in the Urban Stream Maintenance Guidelines can only be implemented in the context of Section 4.13.50.a, so they are always governed by the Riparian Corridor requirements. Additionally, the City of Corvallis, Public Works, Urban Stream Maintenance Guidelines were developed by a Citizen Advisory Group that was formed for the purpose of developing the Guidelines. The Guidelines were approved by the City Council and were developed to ensure that urban stream maintenance protects and enhances the ecosystem and provides for storm drainage **(Attachment A)**. This Council-approved document is used to address ongoing maintenance and property owner concerns regarding urban stream maintenance. This policy is not modified by Staff and is not the subject of this review. Any future modifications would be discussed at a City Council level.

The Urban Stream Maintenance Guidelines include a goal statement, five detailed objectives, and six general guidelines for stream maintenance. The goal statement reads:

> **GOAL STATEMENT:**
> **The community's urban streams function as a major component of the storm water system. The streams and riparian corridors also support fish and wildlife, provide green space and increase livability. The goal of urban stream maintenance is to protect and enhance the ecosystem and provide storm drainage.**

The five detailed objectives address the topics of safe drainage, neighborhood enhancement, quality fish and wildlife habitat, good water quality, and community cooperation and involvement. The six general guidelines for stream maintenance address the topics of foreign debris removal, fire breaks adjacent to wooden structures, vegetation breaks around bridges, removal of trees or limbs that could obstruct channel flow, use of natural materials to stabilize bank erosion, and the filling/plugging of rodent burrow holes.

Given the above, Staff believe that the concerns are addressed and no further modifications to the proposed Legislative Amendment to the Land Development Code are needed.

<u>Fences and Walls</u> -

<u>Concern Raised</u>: The concern raised is that *"5 feet/sec is not a slow flow (erosion occurs at lower velocities). The exemptions for fences/walls in 2.11.40 and parts of Table 4.5-1 are not consistent with prohibitions in 0.2-ft Floodway, Highly Protected Riparian Corridor portions of floodplain, and within 25-ft Partially Protected Riparian Corridor. Within High Protection Floodway Fringe, it conflicts with maintaining floodplain and stormwater functions. Some accommodation should probably be made in Partial Protection Floodway Fringe (outside of PP Riparian Corridor and Floodway), but FEMA's standards don't address our "properly functioning conditions" standard. We need a standard that accommodates fish passage at all flow velocities, limits erosion triggered by fences, and limits damage to neighboring properties when old fences give way under pressure when soil is saturated. Has FEMA mapped flow velocity for our streams?"*

Discussion: Part of the issue raised is that there is a concern that the exemption for fences and walls, as outlined in Section 2.11.40.b, would circumvent the Code's protections for the 0.2-ft Floodway, the Highly Protected Riparian Corridor portions of floodplain, and the Partially Protected Riparian Corridor portions of the floodplain (which, practically speaking, consist of the areas containing the streams, plus the first 25-ft. from Top-of-bank on both sides of streams). However, these areas are all protected by the lead-in for Section 2.11.40 which states:

> **2.11.40 - EXEMPTIONS**
>
> **If allowed by other applicable chapters in this Code (floodplain development may be prohibited per Chapter 4.5 - Floodplain Provisions - Floodplain Provisions, or other restrictions may apply), the following types of Development are exempt from the Floodplain Development Permit process: *[De minimus thresholds developed by Corvallis staff in coordination with FEMA/DLCD]*** (emphasis added)

Therefore, the fences and walls exempted by Section 2.11.40.b are only allowed in areas where they are not prohibited by other sections of the Code. Because of other sections of the Code, such as those in Chapter 4.5 - Floodplain Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions, fences and walls will continue to be restricted from the 0.2-ft Floodway, the Highly Protected Riparian Corridor portions of floodplain, and the protected portion of the Partially Protected Riparian Corridor areas (which, practically speaking, consist of the areas containing the streams, plus the first 25-ft. from Top-of-bank on both sides of streams).

The existing Land Development Code requirements for fences and walls are not being altered or relaxed by the proposed Legislative Amendment to the Land Development Code. Any revised and/or new provisions proposed as part of this Text Amendment still require adherence to other parts of the Code. The proposed Text Amendment introduces design requirements and a Floodplain Development Permit requirement for fences and walls that are located in 100-year Floodplain areas with floodwater velocities of at least 5 ft. per second. As mentioned, such fences and walls may only be located in these areas if other provisions of the Code allow them to be located there. Thus, fence and wall requirements are actually becoming more restrictive than the current Code. As a result, Staff worked very closely with State and FEMA Staff to find a way to implement these more restrictive measures by developing a solution that maintains some flexibility for property owners, does not result in significant impacts in the floodplain, and is relatively easy for Staff to implement. Impacts to Staff are anticipated because of the new Floodplain Development Permit needed for fences and walls in areas with floodwater velocities of at least 5 ft. per second, and because of the increased time it will take explaining the new requirements to property owners and assisting them in interpolating the floodwater velocity affecting their properties. These requirements will place some significant limitations on the development of fences and walls within the floodplain.

Given the above, it is recommended that no further Code modifications be done to address the concerns raised regarding fences and walls. The additional fence and wall requirements shown in the proposed Legislative Amendment to the Land Development Code are mandated by FEMA,

but the introduction of additional fence and wall design standards in areas with floodwater velocities less than 5 ft. per second are not.

Volumetric Exchange -

Concern Raised: The concern raised is that Comprehensive Plan Policy *"4.8.2.C would seem to allow expanding volumetric exchange for additions to existing structures in infill areas (translated as Partial Protections Floodway Fringe) under the threshold of Substantial Improvement, but not for development over that threshold. The Stormwater Master Plan, Comp Plan, and LDC came out of a careful weighing of the trade-offs—the existing standards give flexibility in infill areas, but they avoided balanced cut and fill in small stream systems because it is hard to accomplish here, especially on small lots (and lot by lot), without creating hydrological havoc."*

Discussion: As noted at the beginning of this memo, the existing Land Development Code requirements for Floodplains, Riparian Corridors, Wetlands, Landslide Hazard and Hillside Development, and Significant Vegetation were developed through an extensive public process during the Natural Features Project (2000-2004). This package of Code provisions represents a balance between protection of Natural Hazards and Natural Resources and economic development and housing opportunities. The Natural Features Project incorporated policy direction from three separate City work efforts into the Land Development Code. These three work efforts were the Stormwater Master Plan, the Endangered Species Act Salmon Response Plan, and the Comprehensive Plan Update associated with Periodic Review.

Through that process, the current Land Development Code was determined to implement Comprehensive Plan Policy 4.8.2, which reads:

4.8.2 Land designated as 100-year floodplain shall be treated as follows:

A. Development of new buildings on undeveloped lands (where such development does not fall within the definition of infill contained in Article 50) shall be prohibited in the 100-year floodplain of Corvallis streams, with the exception of the Willamette River, the Marys River, and the Millrace. If pre-existing parcels are entirely within the 100-year floodplain or if this policy renders an otherwise buildable parcel unbuildable, exceptions may be considered to allow limited development. (FP-2)

B. Streets, alleys, driveways, and parking lots on undeveloped lands, with the exception of the Willamette River, the Marys River, and the Millrace, should be located outside the 100-year floodplain and wetlands unless it can be demonstrated that they are constructed in a manner that does not restrict or otherwise alter proper floodplain functions, will cause no harm to the properly functioning condition of the stream, and that no other reasonable option is available. (FP-3)

C. Infill and redevelopment in the 100-year floodplain of Corvallis streams , with the exception of the Willamette River, the Marys River, and the Millrace, shall maintain or improve stormwater functions and floodplain functions existing prior to the

proposed infill or redevelopment, using techniques such as flow-through designs, more pervious surface area, and reduced building footprints. Development standards shall be created to allow additions to existing structures consistent with those structures' design, provided the additions fall below the threshold of "substantial improvement" contained in the Land Development Code and are constructed consistent with FEMA standards. (FP-4)

D. Area-specific development standards for the 100-year floodplain of the Marys River, the Willamette Rivers, and the Millrace shall be instituted to maintain stormwater functions, be proportional to the impact of the development on the receiving water bodies, and minimize impacts to other properties.

E. New City infrastructure, including streets and sanitary sewers, should be located outside the 100-year floodplain and wetlands unless it can be demonstrated that they will cause no harm to the properly functioning condition of the stream and that no other reasonable option is available. (FP-8)

The subsections of Policy 4.8.2 were carefully considered during the Natural Features Project to ensure that a balance was achieved between protection of Natural Hazards and Natural Resources and the need to accommodate economic development and housing opportunities. Policy 4.8.2 contains language that allowed such balancing and was implemented in several fashions. First, inside the City limits a Partial Protection Floodplain status was assigned to 100-year Floodplain areas associated with the Mill Race and Willamette and Marys Rivers. Second, outside the City limits a High Protection Floodplain status was assigned to 100-year Floodplain areas associated with the Mill Race and Willamette and Marys Rivers. Third, High Protection Floodplain status was assigned to the remainder of the 100-year Floodplain areas within the City limits, except already urbanized areas. The areas considered to be already urbanized were assigned Partial Protection Floodplain status. It was recognized that these properties, most of which were already subdivided and included structures, should be allowed to continue to be used for development, provided such development was done in a manner that maintained or improved stormwater and floodplain functions.

Policy 4.8.2.c provides examples of construction techniques for infill and redevelopment that maintain or improve stormwater and floodplain functions, and those examples include techniques such as flow-through designs, more pervious area, and reduced building footprints. However, the list of examples in Policy 4.8.2.c is not exhaustive, since the techniques follow the phrase "such as." Therefore, other techniques such as volumetric exchange can be considered for infill and redevelopment that is allowed by the Code, provided the techniques maintain or improve stormwater and floodplain functions. Policy 4.8.2.c does not address new construction. Therefore, it is also possible to consider volumetric exchange for new construction, where such new construction is allowed by the Code.

Policy 4.8.2.c also directs the City to develop standards to allow additions to existing structures consistent with those structures' design, provided the additions fall below the threshold of "Substantial Improvement" contained in the Land Development Code and are constructed

consistent with FEMA standards. This direction to develop standards does not limit the topics for which the City must develop standards, but rather directs the City to ensure that this particular topic is addressed. Simply put, in developing the current balanced package of Land Development Code standards, the first and second sentences of Policy 4.8.2.c were read independently. The second sentence does not limit the concepts in the first. This is evidenced by the Code's Partial Protection Floodplain provisions which allow development that exceeds the threshold of additions that fall below the level of Substantial Improvement. Additionally, the second sentence does not address new development or additional development on a site where the additional development is a new structure and not an addition. The second sentence doesn't prohibit the development of Code provisions for such new development, redevelopment, or new construction development. Therefore, Code provisions were developed to address these topics and this balanced approach is reflected in the current package of Land Development Code provisions.

Given the above, it is feasible to consider the construction technique of volumetric exchange in Partial Protection 100-year Floodplain areas outside the 100-year Floodplain areas associated with the Mill Race and Willamette and Marys Rivers. However, in order to ensure that such volumetric exchange maintains or improves stormwater and floodplain functions, it is recommended that two additional criteria be introduced, as follows:

1. Use of volumetric exchange shall not result in ponding of water; and
2. Use of volumetric exchange shall include a design that does not cause new or increased drainage onto neighboring properties.

These performance criteria can be incorporated into draft Land Development Code Section 4.5.100.01.b, as follows:

b~~2~~**.** Areas of fill and excavation shall be designed to accommodate floodwater flows and shall not create barriers to the flow of floodwater. Proposals to alter topography in the Floodplain must demonstrate that they will not result in alteration of hydrology or flow regimes that would cause erosion, ~~unwanted~~ ponding, new or increased drainage onto neighboring properties, or other problems;

There are a number of reasons for adding the ability for property owners to use volumetric exchange in all 100-year Floodplain areas designated as Partial Protection Floodplain, and in 100-year Floodplain areas where MADA provisions are used. Some of these reasons include:

- Partial Protection Floodplain areas that are located outside the 100-year Floodplain associated with the Mill Race and Willamette and Marys Rivers do not constitute a large part of the community. These areas are fairly contained.

- In the Partial Protection Floodplain areas that are located outside the 100-year Floodplain associated with the Mill Race and Willamette and Marys Rivers, often the grade change needed to achieve the FEMA-mandated finished floor elevations for residential structures is only a small incremental amount, such as 6 inches. In these situations, flow-through design isn't really feasible and the floodplain volume affected by the structure could be easily balanced by a gentle regrading of part of the site (say, a residential backyard). Use of the volumetric exchange tool would be very helpful to the property owners in these circumstances and would maintain (and perhaps improve) stormwater and floodplain functions.

- For residential structures in the Partial Protection Floodplain areas that are located outside the 100-year Floodplain associated with the Mill Race and Willamette and Marys Rivers, expanding the use of volumetric exchange as an allowed tool is not anticipated to generate sizeable impacts. These are generally already developed areas which have limited opportunities for new structures or redeveloped structures, and tend to involve additions or small new structures such as a garage, etc.

- Commercial construction faces additional challenges in the Partial Protection Floodplain areas that are located outside the 100-year Floodplain associated with the Mill Race and Willamette and Marys Rivers. First, providing flow-through design for structures with larger building footprints is more difficult and costly than for smaller structures such as those typically associated with residential development. Second, ADA access requirements apply to commercial and do not apply to single family residential development. Additionally, FEMA allows construction of commercial buildings below the Base Flood Elevation (BFE) if they are flood proofed. Use of the volumetric exchange tool would be very helpful to the property owners that are developing commercial structures to bring down costs, more easily address ADA access, and use the option of flood proofing.

- One suggested approach is to expand the use of volumetric exchange to a limited extent that would allow commercial structures to fill a minimum amount needed to provide ADA access to public entrances. However, implementation of such a provision is not practical. Working with applicants at the building permit stage to discern between what portions of a project are allowed to use volumetric exchange and what parts are not, will result in property owner frustration. It is likely to result in applicants pushing the envelope as to what site elements are actually associated with such ADA accesses and the need for Staff to make interpretations that will increase property owner frustration.

- One safety issue that has been occurring affects garages in Partial Protection Floodplain areas. Because property owners haven't been allowed to use volumetric exchange, and because flow-through design isn't appropriate for driveways to elevated garages, property

owners often decide to construct garages below the Base Flood Elevation. This type of construction is allowed because it is nonhabitable space. However, even though the City requires the recordation of deed restrictions, etc., to bar those nonhabitable garages from being occupied, the practical reality is that property owners sometimes later turn those areas into habitable space without City approval. This creates a public safety issue. The use of volumetric exchange would allow a property owner to elevate/slope their driveway up to an elevated garage with flow-through design beneath the garage. This would resolve this safety issue.

- Another issue that has been occurring affects the "transition" areas needed to access additions, even if those additions or new structures are constructed with flow-through designs. The finished floor of those structures still needs to be accessed by ramps, stairs, driveways, etc. Oftentimes, those transitions needed to access the elevated finished floors are below Base Flood Elevation and the use of volumetric exchange would resolve these practical issues.

- Some sites are impacted by Natural Hazards and/or Natural Resource to an extent that they qualify to use the Land Development Code provisions for Minimum Assured Development Area (MADA). Development on these sites is challenging and use of the volumetric exchange tool would increase flexibility for property owners, and would allow a MADA mechanism that would not result in a rise in Base Flood Elevation (BFE).

- Sites that qualify to use the LDC provisions for Minimum Assured Development Area (MADA) are not numerous, so impacts from use of volumetric exchange on these properties are not anticipated to be great.

Given the above, it is recommended that volumetric exchange be expanded as currently shown in the Legislative Amendment to the Land Development Code (LDT10-00001), with the additional performance criteria shown for Section 4.5.100.01.b, above.

Missing Phrase -

Concern Raised: The concern raised is that some of the FEMA flood zone definitions in 1.6 are missing the "in any given year" phrase after "one percent chance or greater of flooding."

Discussion: Staff reviewed the proposed modifications to Chapter 1.6 - Definitions - Definitions and found that the only area where the phrase "in any given year" was missing was FEMA's definition for Federal Flood Zone. This text was taken directly from the FEMA website. However, both the federal NFIP floodplain regulations and the most recent draft of the Oregon Most recent draft of the Oregon Model Floodplain Development Ordinance Floodplain Development Ordinance define the Base Flood as ***"the flood having a one percent chance of***

being equaled or exceeded in any given year." This definition is reflected in the City's proposed text change to the Land Development Code Base Flood definition which states:

> **Base Flood - Flood that has a one percent chance of being equaled or exceeded ~~occurring~~ in any given year. Also commonly referred to as the 100-year Flood, the Base Flood has been adopted by the Federal Emergency Management Agency (FEMA) for Floodplain management purposes, and refers to a flood event that inundates the entire 100-year Floodplain. See Floodplain, 100-Year and Flood, 100-Year.** ***[44 CAR 59.1, simplified, & most recent draft of the Oregon Model Floodplain Development Ordinance Section II - Definitions]***

Given the above, the proposed definition for Federal Flood Zone should be modified to be consistent with the current Base Flood definition which includes the phrase ***"one percent chance of being equaled or exceeded in any given year."***

III. RECOMMENDATION

Given the discussion in this memo, the following two changes are recommended for the proposed Legislative Amendment to the Land Development Code (LD10-00001):

1. Incorporate additional performance criteria into Land Development Code Section 4.5.100.01.b, as follows:

   b~~2~~. Areas of fill and excavation shall be designed to accommodate floodwater flows and shall not create barriers to the flow of floodwater. Proposals to alter topography in the Floodplain must demonstrate that they will not result in alteration of hydrology or flow regimes that would cause erosion, ~~unwanted~~ ponding, new or increased drainage onto neighboring properties, or other problems;

2. Modify the proposed definition for Federal Flood Zone to be consistent with the current Base Flood definition which includes the phrase ***"one percent chance of being equaled or exceeded in any given year."***

ATTACHMENTS:

ATTACHMENT A - City of Corvallis, Public Works Department, Urban Stream Maintenance Guidelines

ATTACHMENT B - Vegetation and maintenance use limitations for High Protection Floodplain areas (4.5.90.01), High Protection Riparian Corridor areas (Section 4.13.50.a), and 0.2-ft. Floodway areas (Section 4.5.80.03.a&b)

ATTACHMENT C - 02-11-11 Written Questions from Planning Commissioner Tony Howell

CITY OF CORVALLIS
PUBLIC WORKS DEPARTMENT

URBAN STREAM MAINTENANCE GUIDELINES

GOAL STATEMENT:

The community's urban streams function as a major component of the storm water system. The streams and riparian corridors also support fish and wildlife, provide green space and increase livability. The goal of urban stream maintenance is to protect and enhance the ecosystem and provide storm drainage.

The five objectives for the maintenance of the urban streams are:

1) Safe Drainage:
   The community's urban streams provide for management and conveyance of storm water. Maintenance activities should maintain appropriate flood flow and storage capacities and protect adjacent properties from undue loss due to erosion and animal damage.

2) Neighborhood Enhancement:
   Urban streams enhance community livability and provide green belts that mitigate the harshness of the urban setting. Maintenance activities should maintain or improve the appearance of the stream.

3) Quality Fish and Wildlife Habitat:
   Urban streams, although they may not be pristine, can provide quality fish and wildlife habitat. Protecting natural resources and retaining fish and wildlife can improve livability and is a community responsibility. Maintenance activities should protect, restore or enhance habitat.

4) Good Water Quality:
   Good water quality is both regulation and livability based. Storm water regulations will soon require municipalities to maintain and/or improve stream water quality. Community livability is enhanced by good water quality. Maintenance activities should maintain or improve water quality.

5) Community Cooperation and Involvement:
   Urban streams are a community asset and can serve as a education tool. Citizens cooperation and participation may reduce maintenance needs. Maintenance activities should promote awareness, education and involvement of the community and adjacent property owners.

GENERAL GUIDELINES FOR STREAM MAINTENANCE

The maintenance of the community's urban streams will be conducted on a section by section basis. The maintenance needs for each section may vary depending on a number of factors. Listed below are the general guidelines that will be used.

1. Foreign debris will be removed from the urban stream, (tires, shopping carts, car parts, metal drums etc.)
2. A 15-25 foot fire break will be cut adjacent to any wooden structure (on City property only).
3. A 15 foot vegetation break will be cut around all bridges.
4. Trees or limbs that could obstruct flow will be removed from the flow channel.
5. Bank erosion will be stabilized through the use of natural materials.
6. Rodent burrow holes will be plugged or filled.

ATTACHMENT B

Section 4.5.8~~50.06~~ - STANDARDS IN THE 0.2-FT. FLOODWAY~~Standards in the 0.2-ft. Floodway~~ -

4.5.80.01~~a.~~- Encroachments -

Except as provided in Section 4.5.80.05, n~~N~~o encroachments are allowed within the 0.2-ft. Floodway, with the exception of bridges, infrastructure, utilities, or Water-dependent Uses, for which it may be demonstrated, through hydrologic and hydraulic analyses certified by a registered professional civil engineer and performed in accordance with standard engineering practices, that the proposed encroachment would not result in any increase in flood levels within the community during the Base Flood discharge. Encroachments include fill, N~~n~~ew C~~c~~onstruction, fences, Substantial Improvements, except as provided in Section 4.5.80.03.c, and other ~~d~~Development. Development within the 0.2-ft. Floodway shall comply with all applicable state and federal requirements. Construction of these facilities must be shown to cause minimal harm to the Properly Functioning Condition of the stream. These improvements shall be subject to the City's Engineering Design Standards. *[44 CFR 60.3(d)(3) & Model Ordinance Section V-B(1)]*

4.5.80.02~~b.~~ - Watercourse ~~Alterations~~ Relocations -

Watercourse relocation~~alteration~~ by artificial means is prohibited, ~~with~~ except~~ions only~~ for emergency management purposes, the realignment of Dunawi Creek back to its natural alignment as allowed by the note on the Comprehensive Plan Map, or as mandated by state or federal actions that supercede local authority. For riverine situations, ~~prior to the alteration or relocation of a Watercourse,~~ the applicant who is authorized for such ~~an alteration~~a relocation must notify the Oregon Department of State Lands (DSL) and the Oregon Department of Land Conservation and Development, and submit copies of such notification to the Floodplain Administrator or designee~~City Engineer~~, prior to the relocation of a Watercourse. The applicant is required to submit copies of said notification to those adjacent communities that the Floodplain Administrator or designee~~City Engineer~~ determines should receive such notification. The applicant shall submit to the Floodplain Administrator or designee~~City Engineer~~ certification provided by a registered professional engineer, assuring that the flood carrying capacity of ~~an altered or~~a relocated Watercourse can and will be maintained. *[44 CFR 60.3(b)(6 & 7) & Model Ordinance Section V-R(1-4)]*

4.5.80.03~~c.~~ - Limitations and Exceptions to Activities in the 0.2-ft. Floodway -

In addition to the requirements of the underlying zone, the limitations and exceptions in "a~~1~~," through "c~~3~~," below, and in Sections 4.5.80.04 and 4.5.80.05 shall apply to activities within the 0.2-ft. Floodway. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

a~~1~~. **Removal of Vegetation** - Removal of vegetation from the 0.2-ft. Floodway is prohibited, except for the following purposes, as approved by the Floodplain Administrator or designee~~City Engineer~~:

1.~~a)~~ Stream restoration and enhancement programs;

2.~~b)~~ Removal of Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary in conjunction with vegetation removal, non-rip-rap erosion control measures shall be utilized;

3.~~c)~~ For the ~~d~~Development of Water-related or Water-dependent Uses, provided they are designed and constructed to minimize impact on the existing Riparian Vegetation;

4.~~d)~~ Removal of emergent in-channel vegetation and debris likely to cause flooding events that result in structural damage;

5.~~e)~~ Mowing/cutting of vegetation in a 20-ft. perimeter around buildings and structures for fire hazard prevention;

6.~~f)~~ Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides, or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations and is also subject to the restrictions set forth in the Corvallis Municipal Code; ~~and~~

7.~~g)~~ Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List~~.~~; and

8. For maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines.

b~~2~~. Maintenance within the 0.2-ft. Floodway -

1.~~a)~~ The limitations imposed by this Section do not preclude the routine maintenance of existing buildings and structures, nor the routine maintenance, repair, and replacement of infrastructure in the 0.2-ft. Floodway.

2.~~b)~~ Maintenance of lawns, non-native riparian planted vegetation, and landscaping shall be kept to a minimum. Additionally, the application of herbicides or other pesticides, and the application of synthetic fertilizers is subject to applicable state and federal regulations and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code;

3.~~c)~~ Where replanting is done, native species shall be used, with the exception of continuing agricultural uses, as specified in Section 4.5.80.03.a.6~~4.5.50.07.a.6~~;

4.~~d)~~ Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions;

5.~~e)~~ Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species. However, no trees shall be planted within utility easements; ~~and~~

6.~~f)~~ Disposal of yard waste or other organic materials is prohibited within the Top-of-bank boundary of any Stream, and is regulated by restrictions in the Corvallis Municipal Code~~.~~; and

7. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines.

c~~3~~. Existing Buildings and Structures Constructed Prior to December 4, 1984 - Existing buildings and structures that were constructed prior to December 4, 1984, and are located in the area between the 1.0-ft. Floodway and the 0.2-ft. Floodway shall not be considered Nonconforming Structures for the purposes of this Chapter. Additionally, Substantial Improvement or replacement within the same footprint is permitted. Such replacements shall comply with the mandatory construction standards in Sections 4.5.100.02, 4.5.100.03, ~~4.5.50.08.b~~ and 4.5.110~~4.5.50.08.c~~.

4.5.80.04 - Placement of Fill within the 0.2-ft. Floodway -

Any fill allowed to be placed within the 0.2-ft. Floodway, per Sections 2.11.40, 4.5.80.01, or 4.5.80.05, shall be designed to be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour. This standard shall not be varied. *[Model Ordinance Section V-B(2)]*

4.5.80.05 - Exception to the 0.2-ft. Floodway "No Rise" Standard -

Notwithstanding Section 4.5.80.01, an increase in the Base Flood Elevation within the 0.2-ft. Floodway may be permitted in exceptional circumstances, if the Floodplain Administrator or designee approves the exceptional circumstances and if the applicant obtains approval of a Conditional Letter of Map Revision (CLOMR) by the Federal Emergency Management Agency. An applicant must strictly adhere to the procedures for obtaining a CLOMR, as described in Section 4.5.50.04, and provide copies of a valid CLOMR to the Floodplain Administrator or designee prior to receiving approval of a local land use request that will result in any increase in Base Flood Elevation within the 0.2-ft. Floodway. *[44 CFR 60.3(c)(13) & (d)(4) & 65.3 & Model Ordinance Sections V-B(3 & 5), V-C(2), & V-Q]*

Section 4.5.9~~50.07~~ - STANDARDS IN HIGH PROTECTION FLOODWAY FRINGE AREAS~~Standards in High Protection Floodway Fringe Areas~~

The following standards shall apply to activities and ~~d~~Development in High Protection Floodway Fringe areas, as identified on the Natural Hazards Map. Generally, these areas contain the 100-year Floodplain of local Streams, but not the portions of the Millrace and Willamette and Mary's River 100-year Floodplains within the City Limits boundary, as of December 31, 2004. Additionally, Special Flood Hazard Areas mapped after December 31, 2004, shall all be designated High Protection Floodway Fringe and, once annexed, shall be subject to the standards of this chapter and Chapter 2.11 - Floodplain Development Permit.*[This change echos the findings in both the Natural Features Project's ESEE Analysis and City Council formal findings in the adopting ordinances. The addition of this statement makes this existing fact clear in the Code.]*

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within the High Protection Floodway Fringe. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

4.5.90.01 - ~~a.~~Removal of Vegetation -

Removal of vegetation from High Protection Floodway Fringe areas is prohibited, except for the following purposes, as approved by the Floodplain Administrator or designee~~City Engineer~~:

a~~1~~. Stream restoration and enhancement programs;

b~~2~~. Removal of Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary in conjunction with vegetation removal, non-rip-rap erosion control measures shall be utilized;

c~~3~~. For the ~~d~~Development of Water-related or Water-dependent Uses, provided they are designed and constructed to minimize impact on the existing Riparian Vegetation;

d~~4~~. Removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage;

e~~5~~. Mowing/cutting of vegetation in a 20-ft. perimeter around buildings and structures for fire hazard prevention;

f~~6~~. Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides, or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations,and is also subject to the restrictions set forth in the Corvallis Municipal Code;

g~~7~~. Maintenance and protection of the function of City utilities and transportation facilities located within Floodway Fringe areas; ~~and~~

h~~8~~**.** Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List~~.~~;

i. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines; and

j. Removal of vegetation and maintenance within areas allowed to be developed per the Code's Minimum Assurance Development Area (MADA) provisions.

4.5.90.02 -~~b.~~Building, Paving, and Grading Activities -

Within High Protection Floodway Fringe areas, the placement of buildings and structures or impervious surfaces, as well as grading, excavation, and the placement of fill, is prohibited except as provided in Section 2.11.40 and as stated below. Exceptions to the Floodway Fringe restrictions may be made for the purposes identified in items "a~~1~~," through "g~~7~~," of this Section, provided they are designed and constructed to minimize adverse impacts to Stormwater and Floodplain Functions within the Floodway Fringe, comply with the mandatory construction standards in 4.5.100 ~~4.5.50.08.b~~ and 4.5.110~~4.5.50.08.c~~, and, unless permitted in accordance with Section 4.5.50.04, result in no increase in Base Flood Elevation. *[Reiterates current Code requirements]*

a~~1~~. Replacement or Relocation of Existing Buildings and Other Structures - Replacement or relocation of existing buildings and/or other structures, either within the ~~building's~~ original ~~building~~ footprint, or with the same or reduced square footage area elsewhere in the Floodplain portion of the site. A relocation of an existing building and/or other structure within the same square footage area, but located elsewhere within the Floodplain portion of the site, is only allowed if the relocated building and/or other structure enhances Stormwater and Floodplain Function. The relocation shall be considered to enhance Stormwater and Floodplain Function if it furthers any of the following goals without worsening any other goal:

1.~~a)~~ Replaces standard construction with flow-through construction;

2.~~b)~~ Moves the structure or paved area to a higher elevation;

3.~~c)~~ Moves the structure or paved area further from the Top-of-bank of the adjacent Watercourse;

4.~~d)~~ Reduces the amount of impervious surface area in the Floodway Fringe;

5.~~e)~~ Does not negatively impact non-noxious Riparian Vegetation. Invasive and/or Noxious Vegetation is defined in Chapter 1.6 - Definitions; and/or

6.~~f)~~ Maintains or reduces the volume of floodwater displacement.

["b," below was redundant in many ways, so it was combined with "a."]

~~**b2. Replacement or Relocation of Existing Structures Other than Buildings -** Replacement or relocation of structures other than buildings either within the original footprint, or with the same or reduced square footage elsewhere within the Floodplain portion of the site. A relocation of an existing structure other than a building, within the same square footage area, but located elsewhere within the Floodplain portion of the site, is only allowed if the relocation enhances Stormwater and Floodplain Function. The relocation shall be considered to enhance Stormwater and Floodplain Function if it furthers any of the following goals without worsening another goal:~~

~~1.a) Moves the paved area to a higher elevation;~~

~~2.b) Moves the paved area farther from the Top-of-bank of the adjacent Watercourse;~~

~~3.c) Reduces the amount of impervious surface area in the Floodway Fringe; and~~

~~4.d) Does not negatively impact non-noxious Riparian Vegetation. Invasive and/or Noxious Vegetation is defined in Chapter 1.6.~~

b~~3~~. Additions to existing buildings and structures that either:

1.~~a)~~ Fall below the threshold of Substantial Improvement as defined in Chapter 1.6 - Definitions; or

2.~~b)~~ Will not result in the filling of additional Floodway Fringe area, such as a second story addition or Flow-through Design construction;

c~~4~~. Location, maintenance, repair, and replacement of infrastructure, and construction of streets, utilities, bridges, bicycle, and pedestrian facilities. Location and construction of such facilities within High Protection Floodway Fringe areas must be deemed necessary to maintain a functional system by the City Engineer. This Code, City Transportation and Utility Master Plans, and other adopted City plans shall guide this determination. The design standards of Chapter 4.0 - Improvements Required with Development shall be applied to minimize the impact to the Floodway Fringe area;

d~~5~~. Redevelopment of utility operations existing as of December 31, 2004, is also permitted. Required riparian easement areas shall be re-vegetated consistent with Section 4.13.50.d.1 and Section 4.13.50.d.2 of Chapter 4.13 - Riparian Corridor and Wetland Provisions;

e~~6~~. Development of Water-related and Water-dependent Uses, including associated drainage facilities, water and sewer utilities, stormwater detention and retention facilities, flood control projects, and drainage pumps. These improvements shall be subject to the City's Engineering Design Standards;

f~~7~~**.** Erosion control or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers, or other state or federal regulatory agency with jurisdiction in this area. Erosion control or flood control measures shall either utilize bio-engineering methods other than rip-rap, or shall utilize rip-rap only to address an imminent hazard to a structure built prior to December 31, 2004. If utilized, the rip-rap installation shall be designed by a Professional Engineer Licensed by the State of Oregon and approved by the Oregon Department of Fish and Wildlife; and

g~~8~~**.** Development associated with a Minimum Assured Development Area that would be allowed in accordance with Chapter 4.11 - Minimum Assured Development Area (MADA).

4.5.90.03 -~~**c.**~~ **Subdivisions, Land Partitions, and Property Line Adjustments** -

For properties with Natural Resources or Natural Hazards subject to Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Subdivision, Partition, or Lot Line Adjustment shall create new lots or parcels unless each new and remaining lot or parcel contains:

a~~1~~**.** An area unconstrained by Natural Resources or Natural Hazards;

b~~2~~**.** An area that includes Formerly Constrained Areas; or

c~~3~~**.** Contains an area that includes the areas in "a,"~~c.1.~~ and "b,"~~c.2.~~ above;

and that area is equal to or greater than the Minimum Assured Development Area for the zone or zones in which the ~~d~~Development site falls.

Exceptions to this requirement are lots created for public park purposes and privately- or publicly-owned lots completely contained within land zoned Conservation-Open Space. New Subdivisions and Partitions may contain common open space tracts for the purpose of protecting Natural Resources and/or avoiding Natural Hazards.

4.5.90.04 -~~**c.**~~ **Maintenance within Floodway Fringe Areas** -

The limitations imposed by this Section do not preclude the routine maintenance of allowed or pre-existing buildings, structures, infrastructure, and landscaped areas.

a~~1~~**.** Maintenance of lawns, non-native riparian planted vegetation and landscaping shall not expand lawn areas or remove or damage any non-hazardous tree. A lawn area is defined as vegetated area mowed to an 18-in. or less height;

b~~2~~**.** The application of herbicides or other pesticides, and the application of synthetic fertilizers are subject to applicable state and federal regulations; and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code;

c~~3~~**.** Where replanting is done, native species shall be used, with the exception of continuing agricultural uses, as specified in Section 4.5.90.01.f ~~4.5.50.07.a.6~~;

d~~4~~**.** Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions;

e~~5~~**.** Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species. However, no trees shall be planted within utility easements; ~~and~~

f~~6~~**.** Disposal of yard waste or other organic materials is prohibited within 25 ft. of the Top-of-bank boundary of any Stream, and is regulated by restrictions in the Corvallis Municipal Code~~.~~; and

g. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines.

4.5.90.05 - Use of Minimum Assured Development Area (MADA) Provisions in the 100-year Floodway Fringe -

a. **MADA Provisions Cannot be Used to Encroach into the 0.2-ft. Floodway -** While Section 4.5.80 does allow for some very limited types of activities into the 0.2-ft. Floodway, encroachments for the specific purpose of achieving a Minimum Assured Development Area per Chapter 4.11 - Minimum Assured Development Area (MADA) are prohibited in the 0.2-ft. Floodway. This prohibition is consistent with Section 4.11.50.05.

b. **Floodway Fringe Development Pursuant to MADA Provisions Requires Adherence to Partial Protection Floodplain Provisions -** In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.100 - Standards in Partial Protection Floodway Fringe.

Section 4.13.50 - USE LIMITATIONS AND EXCEPTIONS WITHIN HIGHLY PROTECTED RIPARIAN CORRIDORS AND RIPARIAN-RELATED AREAS

Highly Protected Riparian Corridors are those which have been identified as warranting a high level of protection due to their environmental importance and Natural Resource quality. Riparian-related Areas are defined as Proximate Wetlands, drainage easements and drainage dedications under the City's jurisdiction, and open space tracts that have been created for Riparian Corridor protection purposes. Additionally, The Special Flood Hazard Area~~100-year Floodplain area~~ serves an important Riparian Function. This area is mapped on the City's Natural Hazards Map, and is subject to the protections outlined in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions.

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within Highly Protected Riparian Corridors and Riparian-related Areas, as mapped on the City's Riparian Corridors and Wetlands Map.

a. **Removal of Vegetation** - Removal of vegetation from Riparian Corridors and Riparian-related Areas is prohibited, except for the following purposes:

1. Stream restoration and enhancement programs;

2. Removal of Non-native, Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary, in conjunction with vegetation removal non-rip-rap erosion control measures shall be utilized;

3. Substitution of local source native plant species for non-native plants. Such local source native plant species shall originate from stock collected from wild plants within 75 miles of planting site;

4. Development of Water-related or Water-dependent Uses as defined in Chapter 1.6 - Definitions, provided such Uses are designed and constructed to minimize impact on existing Riparian Vegetation;

5. Removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage;

6. Perimeter mowing/cutting of vegetation for fire hazard prevention/fuel reduction, provided such mowing/cutting occurs no more than 20 ft. around structures;

7. Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations, as well as the restrictions set forth in the Corvallis Municipal Code.

8. Maintenance and protection of the function of City utilities and transportation facilities located within Riparian Corridors and Wetlands;

9. Allowance of activities under an Oregon Department of Fish and Wildlife-approved restoration plan for improving Riparian Function. As a component of this plan, and as a means of controlling the spread of the weeds throughout the Watershed, livestock may be permitted in areas with identified Non-native, Invasive, and/or Noxious Vegetation; and

10. <u>Removal of Hazardous Trees</u> - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List.

b. **Building, Paving, and Grading Activities** - The placement of structures or impervious surfaces, as well as grading, excavation, and the placement of fill, are prohibited. Exceptions to the drainageway restrictions may be made for the purposes identified in items 1-7 of this Section, provided they are designed and constructed to minimize adverse impacts to Riparian Corridors and Riparian-related Areas.

1. Replacement or Relocation of Existing Buildings - Replacement or relocation of existing buildings, either within the building's original footprint, or with the same or reduced square footage area elsewhere on the site. A relocation of an existing building within the same square footage area, but located elsewhere on the site, is only allowed if the relocation of the building enhances Riparian, Stormwater, and Floodplain Functions. Under no circumstances shall a relocated building be located within 15 ft. of Top-of-bank. The relocation shall be considered to enhance Stormwater, and Floodplain Function if it furthers any of the following goals without worsening any other goal:

   a) Replaces standard construction with Flow-through Design construction, if the building is within the 100-year Floodplain (Special Flood Hazard Area);

   b) Moves the structure to a higher elevation;

   c) Moves the structure further from the Top-of-bank of the adjacent water body;

   d) Reduces the amount of impervious surface area in the Riparian Corridor; and

   e) Does not negatively impact non-noxious Riparian Vegetation. Non-native, Invasive, and/or Noxious Vegetation is defined in Chapter 1.6 - Definitions.

2. The location and construction of streets, utilities, bridges, bicycle, and pedestrian facilities within Highly Protected Riparian Corridors and Riparian-related Areas must be deemed necessary to maintain a functional system by the City Engineer. This Code, City Transportation and Utility Master Plans, and other adopted City plans shall guide this determination. The design standards of Chapter 4.0 - Improvements Required with Development shall be applied to minimize the impact to the subject area;

3. Redevelopment of utility operations existing as of December 31, 2004, is also permitted. Required riparian easement areas shall be re-vegetated consistent with Section 4.13.50.d.1 and Section 4.13.50.d.2;

4. Development of Water-related and Water-dependent Uses, as defined in Chapter 1.6 - Definitions, where no other viable locations exist;

5. Erosion control or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers, or other state or federal regulatory agency with jurisdiction in this area. Erosion control or flood control measures shall either utilize bio-engineering methods other than rip-

rap, or shall utilize rip-rap only to address an imminent hazard to a structure built prior to December 31, 2004. If utilized, the rip-rap installation shall be designed by a Professional Engineer Licensed by the State of Oregon and approved by the Oregon Department of Fish and Wildlife;

6. Development associated with the Minimum Assured Development Area that would be allowed in accordance with Chapter 4.11 - Minimum Assured Development Area (MADA); and

7. Water quality or detention facilities located outside of riparian easement areas, as determined in Section 4.13.70.

c. Residential Setback Reduction -

1. When development is occurring pursuant to the provisions of Chapter 4.11 - Minimum Assured Development Area (MADA), the following setback reductions are allowed for properties with Low Density Residential zoning and containing Highly Protected Riparian Corridors. The setback reductions shall apply to:

   a) Redevelopment in which all structures are removed from the Riparian Corridor area; and

   b) New development on vacant properties in which no structures are placed within the Riparian Corridor area.

2. Under the circumstances in “1,” above, front and side yard setbacks may be reduced as shown in “a,” through “c,” below. However, the setback for front-loading garages shall remain at 19 ft.

   a) 10 ft. for the front yard;

   b) five ft. for an interior side yard; and

   c) 10 ft. for an exterior side yard.

d. Re-vegetation of Streambanks - Commensurate with the extent of new development of structures or of impervious surface areas on development sites containing Stream or river frontage as shown on the City’s Riparian Corridors and Wetlands Map, the re-vegetation of Stream banks is required.

For each 500 sq. ft. of new structure area or impervious surface area, 100 lineal ft. of the development site’s Stream frontage shall be re-vegetated according to the following standards, up to the total amount of the development site’s Stream frontage:

1. Stream bank vegetation, as outlined in “2," below, shall be provided within the first 30 ft. from Top-of-bank, with the exception of the Willamette River, which shall be addressed as indicated in “3,” below;

2. Re-vegetation Standards -

a) Streams that already have existing vegetation as outlined in this provision are considered to be compliant with these Stream shading standards. To be considered compliant, at minimum the vegetation within the first 30 ft. from the Top-of-bank, as described in “1" above, shall include:

1) An existing vegetated tree canopy consisting of healthy trees at least four in. caliper, measured at four ft. above Natural Grade, and located at an average spacing of 20 ft. along the Stream bank; and

2) An existing vegetated under story consisting of healthy riparian shrubs over at least 50 percent of the area; and healthy groundcover such that the combination of shrubs and groundcover results in a coverage over at least 90 percent of the area.

b) Streams that do not have the required existing vegetated tree canopy and existing vegetated under story in the area to be shaded are subject to re-vegetation. Such re-vegetation shall either be that required by an Oregon Department of Fish and Wildlife-approved restoration plan for improving Riparian Function, or that required by the provisions outlined below:

1) In areas that do not meet the tree canopy requirement outlined in “a” above, large-canopy riparian trees, such as Acer Macrophyllum, with a minimum caliper size of 3/4 -1 in. shall be planted in a triple row with staggered spacing of 20 ft. on-center along the length of the Stream bank. All new trees are required to be mulched with four cubic ft. of bark chips and drip irrigated for a period of five years to ensure establishment. All new trees shall be staked and protected by rodent-proof fencing, as specified by the Public Works Department;

2) In areas that do not meet the riparian shrub coverage portion of the under story requirement outlined in “a,” above, riparian shrubs shall be planted and maintained to provide the required 50 percent coverage within five years. The minimum planting size for the riparian shrubs shall be one gallon or 18 in. live stakes. All new shrubs shall be mulched with three in. of bark chips, extending one ft. from the drip line of the shrub or around the live stake or live stake bundle. All new shrubs shall also be irrigated and maintained for a period of five years to ensure establishment.

3) In areas that do not meet the groundcover coverage portion of the under story requirement outlined in “a,” above, groundcover shall be maintained or planted to provide a minimum of 90 percent total coverage of shrubs and ground covers within five years. The minimum planting size shall be one gallon. Ground covers shall be mulched with three in. of bark chips and irrigated for a period of five years to ensure establishment.

3. For properties along the Willamette River, any re-vegetation within the Willamette River Greenway (WRG) shall be determined through the WRG Conditional Development review process and shall be based upon the procedures and criteria contained in Chapter 2.3 - Conditional Development and Chapter 3.30 - Willamette River Greenway (WRG) Overlay. However, for Riparian Corridor areas of the Willamette River Greenway that are subject to the provisions of this Chapter, and are preserved as part of the Conditional Development process, such preserved portions of Riparian Corridors shall be subject to the re-vegetation standards contained in section "2.b," above.

e. **Subdivisions, Land Partitions, and Property Line Adjustments** - For properties with Natural Resources or Natural Hazards subject to Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Subdivision, Partition, or Lot Line Adjustment shall create new lots or parcels unless:

1. Each new and remaining lot or parcel contains an area unconstrained by Natural Resources or Natural Hazards; and

2. The unconstrained area in "1," above, is equal to or greater than the Minimum Assured Development Area for the zone or zones in which the development site falls.

Exceptions to this requirement are lots created for public park purposes and privately- or publicly-owned lots completely contained within land zoned Conservation-Open Space. New Subdivisions and Partitions may contain common open space tracts for the purpose of protecting Natural Resources and/or avoiding Natural Hazards.

f. **Maintenance** - The limitations imposed by this Section do not preclude the routine maintenance of structures and landscaped areas.

1. Maintenance of lawns, non-native riparian planted vegetation and landscaping shall not expand lawn areas or remove or damage any non-hazardous tree. A lawn area is defined as a vegetated area mowed to 18 in. or less in height.

2. The application of herbicides or other pesticides, and the application of fertilizers are subject to applicable state and federal regulations; and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code.

3. Where replanting is done, vegetation shall be replanted with native species or approved alternatives, with the exception of continued Agricultural Uses, as specified in Section 4.13.50.a.7.

4. Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions.

5. Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species.

6. Disposal of yard waste or other organic materials, with the exception of downed trees, leaf litter from Riparian Vegetation, and mulch for allowed riparian plantings, is:

   a) Prohibited within Highly Protected Riparian Corridors;

   b) Prohibited within 25 ft. of the Top-of-bank within Partially Protected Riparian Corridors; and

   c) Regulated by restrictions in the Corvallis Municipal Code.

g. **Exemptions** - When performed under the direction of the City, and in compliance with the provisions of the Stormwater Master Plan, the following activities shall be exempt from the provisions of this Chapter:

1. Response to public emergencies, including emergency repairs to public facilities; and

2. Routine maintenance or replacement of existing public facilities.

Potter, Kelly

From: Howell, Tony [thowell@co.linn.or.us]
Sent: Friday, February 11, 2011 8:49 AM
To: Potter, Kelly
Cc: Young, Kevin; Extrom, Joan
Subject: FEMA comments & questions
Attachments: FEMA LDC changes, memo to staff 2-9-11.doc

Kelly,

Sorry about the delay ... my e-mail at home has been broken. I decided today to give up and e-mail this from work. Please call me if you have any questions. Thanks.

Tony Howell
541-760-3828

Memorandum

To: Kelly Potter, Corvallis Planning Division

From: Tony Howell, Planning Commission

Date: February 9, 2011

Subject: FEMA LDC Amendment questions for deliberations

Thanks for all your work on this project!

The following are my questions (italicized) and concerns for staff consideration on the draft LDC language, pending any additional written testimony we will receive. They are all in three topic areas, and the page numbers refer to the page in the Staff Report or Attachment.

Public Works Urban Stream Maintenance Guidelines

Thank you for providing the current Urban Stream Maintenance Guidelines at the hearing.

The proposed amendment would add "Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines" to the list of exemptions for the removal of vegetation, etc., in floodways (4.5.80.03.a.8 and 4.5.80.03.b.7, p. A-354) and in the High Protections Floodway Fringe (4.5.90.g, p. A-356). My concern is that these Guidelines (primarily #4 and 5) are less restrictive than current LDC standards, and potentially inconsistent with City policies. For example, the current 4.5.90.d (new numbering, p. A-356) allows "removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage." The "Guidelines" state that any vegetation that "could obstruct flow will be removed [*emphasis added*]." This is the old 1990s approach to stream maintenance (when these Guidelines were written), and new language was purposely chosen in the Stormwater Master Plan and Comp Plan to revise these Guidelines. Examples of relevant SWMP policies:

- **QN-13:** The City shall use maintenance policies that enhance the natural detention capacity and upstream storage capacity of urban streams, such as retaining vegetation and wood, and allowing beaver dams to remain instream.
- **UP-1:** The City shall ensure that operation and maintenance practices protect, enhance, and restore upland natural areas and their functions and processes.
- **SS-15:** The City shall work to develop maintenance practices that enhance and protect stream conditions.

Comp Plan policies, including 4.10.3 and 4.10.5, were also intended to limit vegetation removal in streams to extreme circumstances. Vegetation and downed wood in streams is important for fish habitat, pool formation, water quality, shading, reduction of velocities and erosion, and are part of the "properly functioning conditions" required by our policies.

I am also uncomfortable with incorporating an exemption for activities listed in a referenced document that can change without an evaluation of its consistency with land use policies.

Are there specific maintenance activities consistent with SWMP and Comp Plan policies that Public Works is prevented from doing by current LDC language? If so, I'd prefer we consider adding those specific activities to the list of exemptions, rather than incorporate a reference to a document.

Fences and Walls

As noted in testimony, fences and walls create problems during flood events, causing erosion (often on the upstream neighbor's property), changing flow patterns, and frequently being torn out and taken downstream to damage others' property. For that reason, we need to be careful about what we are changing here.

The draft amendment gives the impression of allowing any wall or fence in areas where the flow velocity is <5ft./sec. (2.11.40b Exemptions, p. A-193), or allowed with a specific flow-through design in areas where velocity is >5ft./sec., consistent with Table 4.5-1 (Attachment A-371). However, other existing standards in the LDC prohibit all walls and fences:

- In the 0.2-ft. floodway (unless part of City infrastructure, etc), per 4.5.80.01 (p. A-352)
- In the Highly Protected Riparian Corridor, per 4.13.50.b (p. A-414)
- In the 25-ft Partially Protected Riparian Corridor, per 4.13.60.b (p. A-420)
- In the High Protection Floodway Fringe, except for existing structures, per 4.5.90.02.

If my reading of this is correct, and the new Fences and Walls standards were only intended to apply to other areas (mainly Partial Protection Floodway Fringe outside the 25-ft riparian corridor), should we add language to 2.11.40.b (Exemptions), 4.5.110.12 (Fences and Walls), and Table 4.5-1 to clearly communicate that?

Even in the Partial Protection Floodway Fringe, I am concerned about allowing unlimited fences and walls where the flow is <5ft./sec, given the risk at that velocity to erode property, block fish passage, and wash fences downstream. On the other hand, requiring permits (and the flow-through designs in Table 4.5-1) at a lesser velocity will increase the number of property owners needing a permit. I would propose that we:

- Set a standard for permeability for fences for those properties qualifying for the 2.11.40.b exemption, such as a maximum of 2/3 coverage in any 2-foot stretch of fencing (which would allow the use of 4-in wood fencing with 2-in gaps), or implement the standards in Table 4.5-1 (without having to apply for a permit).

Could staff develop some potential language for this? Are there other options for accomplishing the same objectives?

Volumetric Exchange

The amended language that expands the use of volumetric exchange to all Partial Protection Floodway Fringe areas is in conflict with Comp Plan policy 4.8.2.c & d (and SWMP policies FP-4 & 5), which are the basis for our current standards allowing volumetric exchange only in the floodplains of the Willamette, Marys, and Millrace. We need to be consistent with these policies.

The SWMP tried to balance the best practice of avoiding development in floodplains with practical local considerations. It came up with the compromise that: 1) the (largely slow-flow) large river floodplain (Willamette/Marys/Millrace) could tolerate the hydrological impact of balanced cut and fill, so volumetric exchange is allowed; 2) in small stream floodplains in infill areas development would be allowed with flow-through design; and 3) development would be prohibited in small stream floodplains in greenfield areas, where properties are typically large enough to develop outside the floodplain.

CP 4.8.2.c does give direction to develop standards that allow additions to existing structures that are under the threshold of "substantial improvement" (<50% of value) to be constructed with the same design as the existing structure. Since we haven't developed those standards, I could support allowing volumetric exchange for these additions, but maintain the requirement for flow-through design on larger additions or re-development.

Another issue raised by staff is the difficulty for some commercial structures to meet ADA standards without fill at the public entrance. This could be remedied by allowing volumetric exchange (balanced cut and fill) for the public entrance portion of the commercial building.

If you could, I would like staff to be prepared with language that would maintain the current requirement of flow-through design in small stream Partial Protection Floodway Fringe, but add exceptions to allow volumetric exchange for: 1) commercial and residential additions to existing structures, where the addition falls below the threshold of "substantial improvement," and 2) for commercial structures, allowing the minimum fill necessary to provide ADA access to the public entrance of the commercial structure.

Community Development
Planning Division
501 SW Madison Avenue
Corvallis, OR 97333

Approved as corrected, March 16, 2011

CITY OF CORVALLIS
PLANNING COMMISSION MINUTES
February 2, 2011

Present
Tad Abernathy
James Feldmann
Jennifer Gervais, *Chair*
Frank Hann
Tony Howell
Roger Lizut
Jim Ridlington
Biff Traber, *Council Liaison*

Staff
David Coulombe, Deputy City Attorney
Kelly Potter, Senior Planner
Jeff McConnell, Development Engineer Supervisor
Lisa Franklin, Civil Engineer I
Terry Nix, Recorder

Excused
Steve Reese
Jasmin Woodside

SUMMARY OF DISCUSSION

	Agenda Item	Information Only	Held for Further Review	Recommendations
I.	Visitors' Propositions	X		
II.	Public Hearing: **Land Development Code Text Amendment to Address FEMA Floodplain Maps and Regulations (LDT10-00001)**		X	
III.	Old Business	X		
IV.	New Business	X		
V.	Adjournment – 8:30 p.m.			

CONTENT OF DISCUSSION

The Corvallis Planning Commission was called to order by Chair Jennifer Gervais at 7:05 p.m. in the Downtown Fire Station Meeting Room, 400 NW Harrison Boulevard.

I. VISITORS' PROPOSITIONS: There were no propositions brought forward.

II. PUBLIC HEARING – Land Development Code Text Amendment to Address FEMA Floodplain Maps and Regulations (LDT10-00001)

A. Opening and Procedures:

The Chair welcomed citizens and reviewed the public hearing procedures. There will be a staff report and public testimony. The Commission may ask questions of staff, engage in deliberations, and make a recommendation. Any person interested in the agenda may offer relevant oral or written testimony. Please try not to repeat testimony offered by earlier speakers. It is sufficient to say you concur with earlier speakers without repeating their testimony. For those testifying this evening, please keep your comments brief and directed to the criteria upon which the decision is based.

Land use decisions are evaluated against applicable criteria from the Land Development Code and Comprehensive Plan. A list of the applicable criteria for this case is available as a handout at the back of the room.

Persons testifying may request that the record remain open seven additional days to submit additional written evidence. Requests for allowing the record to remain open should be included within a person's testimony.

The Chair opened the public hearing.

B. Declarations by the Commission:

1. Conflicts of Interest: None.

C. Staff Report:

Senior Planner Kelly Potter reviewed the request to consider adoption of legislative revisions to the Corvallis Land Development Code (LDC) to address new Federal Emergency Management Agency (FEMA) floodplain maps and regulations. She said FEMA began its nationwide map modernization project in 2005 and completed its process to update the Benton County Flood Insurance Study (FIS) and associated Flood Insurance Rate Map (FIRM) on December 2, 2010. The FIS and FIRM will be effective on June 2, 2011. FEMA digitized the current paper FIRM maps associated with the FIS; no new floodplain studies were done. Digitization of the FIRM was based on local topographic maps; some of the new floodplain boundaries are different than those shown on the current paper FIRM maps. The FEMA process for public review and comment has been completed and the new DFIRM (Digitized Flood Insurance Rate Map) maps will be contained in the new FEMA scientific engineering report for Benton County. As part of FEMA's project, an assessment of the City's current LDC was completed by the Oregon Department of Land Conservation and Development (DLCD). That assessment identified certain federal and state regulations that must be implemented in order for the City to remain eligible for participation in the National Flood Insurance Program (NFIP). FEMA directed the City to implement the new DFIRM maps and update its land use regulations by June 2, 2011; failure to do so would immediately remove the community from the NFIP. Banks and insurance

companies must also begin using the new DFIRM maps to determine whether flood insurance is required and to calculate the cost of insurance policies.

Planner Potter said that some of the FEMA map updates will affect the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and the High Protection and Partial Protection Floodplain boundaries on the Natural Hazards Map. Since the revisions are mandated by FEMA, they are allowed through the Map Refinement procedures in LDC 4.5.90 and do not require a formal land use process. Staff are working with DLCD/FEMA staff to implement the changes and they will not be addressed as part of this public hearing process. The new DFIRM is legal to use now and must be used beginning June 2, 2011. A comparison of the floodplain boundaries from the current FIRM and the new DFIRM is available on the City's website. People with questions or concerns about the new FEMA maps are encouraged to contact City staff. Staff can assist with explanations of FEMA processes such as the Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR); can provide a floodplain determination letter for people to send to their bank if their structure is outside the floodplain, even if a portion of the property is within the floodplain; and can provide personalized maps showing the changes in FEMA's 100-year Floodplain boundaries.

Planner Potter said this public hearing is on the amendments to the City's land use regulations. The revised LDC must fully implement the mandatory NFIP floodplain regulations by June 2, 2011. These new standards would apply to properties within the 100-year Floodplain on the new FEMA maps. For properties that contain streams but are in areas where no FEMA study has yet been done, NFIP regulations require further study in conjunction with future development to determine the extent of any 100-year Floodplain boundaries; no study is required to maintain existing development. The new standards would also apply to properties within 100-year floodplain areas identified in future floodplain studies. The Text Amendment and staff report can be found on the City's website, at the Corvallis-Benton County Library, and at the City's Planning Division. The Text Amendment will augment and modify the LDC definitions in Chapter 1.6 so that the terminology related to floodplains is consistent with mandatory NFIP standards; will implement the mandatory Floodplain Development Permit program through standards in a new Chapter 2.11 – Floodplain Development Permit; and will significantly modify Chapter 4.5 by fully addressing the NFIP regulations, renaming the chapter to Floodplain Provisions; and relocating the landslide hazard and hillside development standards to a new chapter entitled Chapter 4.14 – Landslide Hazards and Hillside Development Provisions. The Text Amendment will also involve housekeeping changes to the rest of the LDC to reflect new/changed section numbers, terminology, and cross-references. Planner Potter reviewed key revisions to Chapters 1.4 – Nonconforming Development and 1.6 – Definitions, new Chapter 2.11 – Floodplain Development Permit, renamed Chapter 4.5 – Floodplain Provisions, and new Chapter 4.14 – Landslide Hazard and Hillside Development Provisions, as detailed in the written staff report. She then reviewed the applicable criteria and staff conclusions, as detailed in the written staff report. Based on the criteria and conclusions in the staff report, staff recommend that the Planning Commission recommend that the City Council approve the proposed Legislative Amendment to the Land Development Code (LDT10-00001), with the language as proposed in Attachment A, and based upon findings 1-8 listed on pages 43-46 of the staff report.

D. Public Testimony in favor of the proposed action:

Terry Ravlin said he is testifying in favor because it seems clear that the sanctions for not approving the request are so severe that he doesn't see that there are any options. His questions, which he doubts the Commission can answer, are whether anyone has made a representation that the new maps are more accurate, who made that representation, what that representation is based on, and how much more accurate the new maps are represented to be.

E. Public Testimony in opposition to the application:

David Steele said that having the federal government make everyone get flood insurance sounds to him like the fox guarding the henhouse. He noted that the healthcare plan recently passed by the Obama administration is going to the high court; he asked where the federal government gets the right to require flood insurance and if people don't think this will also go to the high court.

F. Neutral Testimony:

Patricia Benner said she was on the Stormwater Planning Committee (SWPC) and she is a stream ecologist; she would like to bring some institutional memory and thoughts to this process. The SWPC gave thought to the two types of water courses and realized that the impacts are greater with one development on a local stream than with one development on the larger rivers. The SWPC suggested policies related to new development and the Natural Features process went forward on those recommendations. The SWPC recognized that some places were already developed in the floodplain and hoped that, over time, the City could move or improve the quality of that development for a healthier floodplain situation. Ms. Benner said she has been amazed at how much damage happens after a flood event and how angry citizens become with the City; there are costs and conflicts associated with development in the floodplain. She said it may be helpful to encourage or require people to put houses on pilings when they redevelop to reduce conflict and to show potential buyers that there is something different in the landscape.

Ms. Benner said fish go to the floodplain to feed and the floodplain is important for managing excess water and for managing kinetic energy in flood water. She said we need to think about more than FEMA's goals. She said she cannot think of a situation where walls are appropriate in the floodplain; they can fall or isolate part of the floodplain. Ms. Benner expressed concern about the 5-feet per second velocity as a standard for when one has to get a permit for a fence; she would suggest a 1-foot per second standard. She distributed information taken from *Stream Hydrology: An Introduction for Ecologists,* and said the velocity required for erosion for small and large particles is about 4-feet per second; for medium-sized particles is less than 1-foot per second.

Ms. Benner requested that the record be held open.

G. Request to Hold the Record Open:

MOTION: Commissioner Howell moved to hold the record open for seven days. Commissioner Hann seconded the motion and it **passed** unanimously.

The record will be held open until February 9, 2011, 5:00 p.m. for additional written testimony.

H. Questions from the Commission:

Chair Gervais asked for a staff response to Mr. Ravlin's questions about whether the new maps have been represented as being more accurate. Planner Potter said that FEMA has gone through its public process and has directed the City to use the new maps. FEMA has said the digital format is typically more accurate. The City is not making a formal judgment because these are federal maps that the City has no say over. If people disagree with what is shown on the FEMA maps, City staff will help them understand their options and help them through the processes available to try to exempt their property from the floodplain.

Chair Gervais asked for a staff response to Mr. Steele's concern regarding the insurance requirement. Planner Potter said that, post-Katrina, the federal government is leaning heavily on banks to require flood insurance with mortgages. If people own their own home or owe less than $5,000, insurance is not required. The City does not have rules requiring insurance but is encouraging citizens to understand requirements associated with financing and to be proactive.

Commissioner Howell reviewed several questions that he emailed to staff; that email is included in the materials previously distributed. He said some of the definitions are missing the "in any given year" phrase after "one percent chance or greater of flooding"; Planner Potter said staff will look at that. He reviewed his concern that the Public Works Urban Stream Maintenance Guidelines have evolved over the years in a way that is not necessarily tied to stormwater policies or natural features requirements; he would like to have more discussion about this during deliberations. Another general area he would like to include in deliberations is the subject of volumetric exchange and the intent of Code requirements, which were developed shortly after the 1996 flood event. He would also like to discuss the issue of fences and walls; FEMA has a single focus in this area, but he would like to have a discussion about the City's multi-level focus and how to have standards that are consistent with Comprehensive Plan policies, especially related to partial protection zones.

Commissioner Hann asked if information about the LOMA and LOMR can be found on the City's website. Planner Potter said that information is not on the City's website because the City is not the processor of those applications; however, the information is available on FEMA's website and staff are available to help citizens through the process. She stressed that citizens are encouraged to contact City staff for assistance.

In response to further inquiry from Commissioner Hann, Planner Potter said the regulations include specific information about flow-through design; that information is on the City's website and staff are also available to help citizens with that information.

III. OLD BUSINESS:

Chair Gervais announced that Commissioner Abernathy is no longer able to serve as liaison to the Housing and Community Development Commission (HCDC). Commissioner Lizut will now serve in that position.

IV. NEW BUSINESS:

Planner Potter said that deliberations on the Land Development Code Text Amendment to address new FEMA maps and regulations will be held on February 16, 2011. A third meeting date has been reserved for this issue if needed.

Commissioner Ridlington expressed appreciation for the staff report tonight, which provided information to citizens on how to access information and assistance on the floodplain regulations even though that was not the focus of the public hearing. He said this seemed to preemptively address the concerns of the most of the citizens in attendance. Several Commissioners agreed.

VI. ADJOURNMENT: The meeting was adjourned at 8:30 p.m.

Corvallis Planning Division
Report to Planning Commission
PC Hearing – February 2, 2011
Report – January 21, 2011
Kelly Potter – 766-6908

CASE **Legislative Amendment to the Land Development Code to Address FEMA Requirements (LDT10-00001)**

REQUESTS **Consider adoption of legislative revisions to the Corvallis Land Development Code to address new Federal Emergency Management Agency (FEMA) floodplain maps and regulations.**

APPLICANT City of Corvallis

LOCATION Applies to properties Citywide

PUBLIC COMMENT 1,313 notices were mailed to owners of 1,750 properties with nine written comments received as of January 21, 2011. Property owners that owned multiple properties were mailed a single notice with the multiple properties listed on that notice.

ATTACHMENTS

A - Proposed Ordinance 2011-01, Including Proposed Changes to the Land Development Code Text

B - December 2, 2010, Letter of Final Determination from Federal Emergency Management Agency (FEMA)

C - December 22, 2010, Memo from Community Development Director Ken Gibb, to Mayor and City Council Regarding Initiation of LDT10-00001

D - January 3, 2011, Excerpt of City Council Minutes Regarding Initiation of LDT10-00001

E - Submitted Public Written Testimony

F - Applicable Decision Criteria

BACKGROUND

The City of Corvallis has administered floodplain development standards for areas of the City inside of the 100-year Floodplain since prior to adoption of the 2006, Revised Land Development

Code (LDC). Many of the regulations currently contained in Land Development Code Chapter 4.5 were taken directly from the federal regulations that a local jurisdiction must comply with in order to participate in the National Flood Insurance Program (NFIP). By adopting these regulations, property owners who must obtain flood insurance receive discounts on their policies. Presently, owners of property within the City of Corvallis qualify for a 10 percent reduction to the base cost of flood insurance policies due to the package of floodplain development regulations already in place. Despite its general consistency with federal requirements, an outside assessment of the City's current Land Development Code (LDC) that was completed by the Oregon Department of Land Conservation (DLCD) has identified certain regulations that must be implemented in order for the City to remain eligible for participation in the NFIP. This review was completed as part of the Federal Emergency Management Agency (FEMA)'s nationwide project to update the country's federal Flood Insurance Rate Maps (FIRMs).

In 2005, the Federal Emergency Management Agency (FEMA) began its nationwide project and on December 2, 2010, FEMA completed its process to update the Benton County Flood Insurance Study (FIS) and associated Flood Insurance Rate Map (FIRM). The FIS and FIRM will be effective on June 2, 2011. As part of this map modernization process, FEMA digitized the current paper FIRM maps associated with the Benton County Flood Insurance Study. No new floodplain studies were done. The digitization of the FIRMs was based on local topographic maps and, as a result, some of the new floodplain boundaries are different than the boundaries shown on the current paper maps. The FEMA process for public review and comment on the FIRMs has already been completed and the new maps will be contained in the FEMA scientific engineering report entitled, *"The Flood Insurance Study for Benton County, Oregon and Incorporated Areas" dated June 2, 2011, with accompanying Flood Insurance Rate Map (FIRM)."*

FEMA FIRM Map Implementation -

As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011. If the City fails to do so, the community will be immediately removed from the NFIP **(Attachment B)**. Banks and insurance companies must also begin using the new FIRM maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through the Map Refinement process outlined in Section 4.5.90.

As mentioned, in some cases, the FEMA map modernization resulted in changes to flood zone boundaries. In such cases, the FEMA map updates will affect the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and will also affect the High Protection and Partial Protection Floodplain boundaries on the Natural Hazards Map (a component of the Zoning Map). Since these map revisions are mandated by FEMA, they are currently allowed through the Map Refinement procedures in Section 4.5.90 and do not require any formal land use process. Therefore, City staff are working with DLCD/FEMA staff, to implement the mapping changes by June 2, 2011, and the map revisions will not be addressed further in this staff report.

Legislative Amendment to the Land Development Code -

Because the revisions to the Flood Insurance Study (FIS) report for Benton County and the revised FIRM for the community have been completed, FEMA sent the City a Letter of Final

Determination dated December 2, 2010, which stated certain additional requirements that must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within six months from the date of the FEMA letter. Prior to June 2, 2011, the City is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.). The NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature. In its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision **(Attachment B)**.

In its letter of December 2, 2010, FEMA also stated that some of the standards should already have been enacted by the City in order to establish eligibility in the NFIP, and additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have been previously adopted that meet or exceed the minimum requirements of 60.3(d);

The FEMA stated that if the City fails to enact the necessary floodplain management regulations by June 2, 2011, it will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the Flood Disaster Protection Act of 1973, as amended **(Attachment B)**. Since the DLCD review of the City's floodplain management program revealed some areas of the City's Land Development Code that needed to be revised to fully meet the NFIP requirements, the City needs to pursue Option #1, above, and the City Council initiated this Land Development Code Text Amendment on January 3, 2011 **(Attachments C and D)**.

The most recent draft of the Oregon Model Floodplain Development Ordinance was developed by DLCD in coordination with FEMA and the state Building Codes Division, so that state-specific land use and building code provisions are integrated with federal NFIP floodplain regulations. This most recent draft is currently under review by FEMA. The DLCD has also been working with FEMA to ensure that existing development codes of jurisdictions affected by the map modernization process are consistent with current federal 100-year Floodplain regulations. As a result, DLCD has performed detailed reviews of existing floodplain development standards from each jurisdiction in Oregon, including the City of Corvallis, and identified areas of inconsistency.

Perhaps the most important of these identified issues for Corvallis is the need to create an independent Floodplain Development Permit program that will track development in the 100-year floodplain. While the City of Corvallis has been indirectly tracking development within the 100-year floodplain for many years, the information has not been kept separate from other building

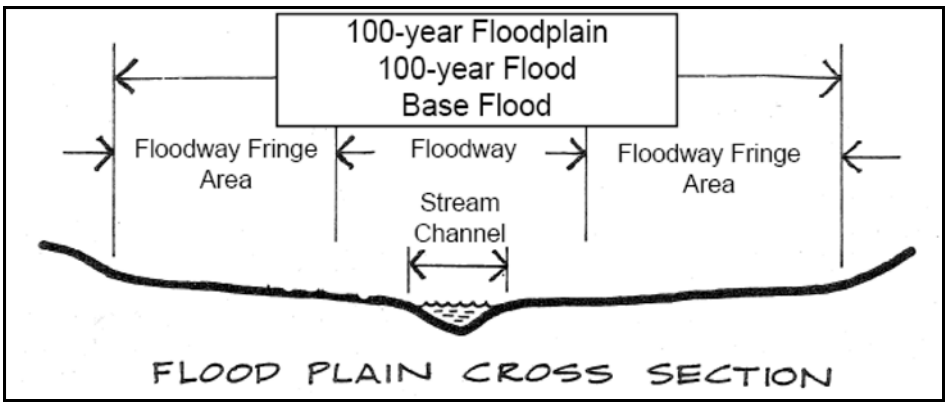
permits or permanently retained, as required by the federal regulations. City Staff have used the most recent draft of the Oregon Model Floodplain Development Ordinance as the basis for addressing the identified areas of inconsistency. This includes the creation of a Floodplain Development Permit process, with the goal of achieving consistency with state and federal NFIP floodplain regulations. The benefit of achieving a high level of consistency with these regulations is that it improves the community's chances for future additional flood insurance policy discounts. This means that those within the community who must pay for flood insurance would pay lower rates.

Working from the existing Land Development Code regulatory framework, the bulk of the required amendments to the Code occur within LDC Chapter 4.5 - Natural Hazard and Hillside Development Provisions. Changes to Chapter 1.4 - Nonconforming Development, Chapter 1.6 - Definitions, and Chapter 2.5 - Planned Development were also necessary to comply with the federal regulations and maintain consistency across these coordinated chapters. In addition, a new chapter, Chapter 2.11 - Floodplain Development Permit, was created to satisfy the federal requirement of a Floodplain Development Permit for many of the development activities that occur within the 100-year Floodplain. In general, Chapter 4.5 will continue to contain the standards applicable to development within the 100-year floodplain, while Chapter 2.11 will describe the process for obtaining the necessary permits. To facilitate a review of the proposed Legislative Amendment to the Land Development Code, citations from the relevant federal regulations (44 CFR) and sections of DLCD's most recent draft of the Oregon Model Floodplain Development Ordinance have been provided in each chapter at the end of new or modified text. Lastly, it should be noted that standards pertaining to landslide hazards and hillside development have been relocated to a new chapter, Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist both internal and external customers in finding the appropriate Code sections more easily.

Consistent with past practice, amended text in each of the Code chapters is depicted in one of two ways. New text is shown with a double underline (Floodplain Development Permit), while previously adopted text proposed for deletion is shown as struck through (~~1.0 ft. floodway~~). Although the entirety of Chapter 2.11 is new, none of the text in this chapter is shown with a double underline; doing so is unnecessary since the entire chapter is new.

Basic Components of 100-year Floodplain -

The Federal Emergency Management Agency (FEMA) defines the 100-year Floodplain as a community's Special Flood Hazard Area (SFHA). To assist in providing a framework for the discussions in this report, the actual federal definition for SFHA is listed below, along with definitions for the actual components of the 100-year Floodplain. These definitions are all included in the proposed new Land Development Code Section 1.6.40, within Chapter 1.6 - Definitions.

Special Flood Hazard Area (SFHA)	The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Federal Flood Zone designations on FIRMs include the letters A or V. Also known as the Special Flood Hazard Area (SFHA). See also "Floodplain, 100-year." *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Floodplain, 100-year	As shown below in Figure 1.6-16 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Administrator or designee is authorized through Sections 4.5.50.03.p and 4.5.60.01.b to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*  Figure 1.6-16 - Floodplain Cross Section

Floodway (Regulatory Floodway)	The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge and store the floodwater or flood flows associated with the regulatory flood.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]* **a.** **Floodway, 0.2-ft.** - As shown above in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the Water Surface Elevation more than 0.2 ft. The Regulatory Floodway for the City of Corvallis is the 0.2-ft. Floodway. **b.** **Floodway, 1.0-ft.** - As shown above in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the Water Surface Elevation more than 1.0 ft. The Federal Emergency Management Agency (FEMA) identifies the Regulatory Floodway as the 1.0-ft. Floodway, but also recognizes the City of Corvallis 0.2-ft. Floodway as the Regulatory Floodway for the City of Corvallis. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Floodway Fringe	As shown in Figure 1.6-16 - Floodplain Cross Section, the area of the 100-year Floodplain lying outside of the Floodway. Context is the 0.2-ft. Floodway, unless specifically identified as the 1.0-ft. Floodway. See Floodway (Regulatory Floodway) *[Current Code]*

FORMAT OF THIS REPORT

This report is organized into two parts, one of which addresses the proposed Legislative Amendment to the Land Development Code and one of which provides an analysis of the proposed LDT10-00001 with respect to the Statewide Planning Goals. The first part will contain a listing of the applicable criteria, a discussion, a summary of conclusions, and staff's recommendation. The second part will contain an analysis of the proposed legislative amendment in relation to the Statewide Planning Goals. The two major parts of the report are:

I. Legislative Amendment to the Land Development Code
II. Analysis of Statewide Planning Goals

ACTIONS REQUIRED BY THE PLANNING COMMISSION

Following the public hearing, the Planning Commission will make a recommendation to the City Council regarding the Legislative Amendment to the Land Development Code.

PART I - LEGISLATIVE AMENDMENT TO THE LAND DEVELOPMENT CODE

The LEGISLATIVE AMENDMENT TO THE LAND DEVELOPMENT CODE PROCESS

The LDC outlines procedures for Legislative Amendments to the LDC in Chapter 1.2. This chapter states that such amendments must be initiated by a majority vote of the Planning Commission or a majority vote by the City Council. The City Council initiated the process for consideration of the floodplain development regulations (LDT10-00001) on January 3, 2011 **(Attachments C and D)**.

To approve a Legislative Amendment to the Land Development Code, it must be found that the proposal complies with the applicable Comprehensive Plan Policies, applicable sections of the LDC, and the Oregon Statewide Planning Goals and Guidelines. The Planning Commission is required to hold a public hearing regarding the Legislative Amendment to the LDC and develop a recommendation to the City Council.

APPLICANT'S PROPOSAL

It is requested that the Planning Commission recommend that the City Council approve the proposed Legislative Amendment to the LDC, based upon the information and evaluation contained within this staff report.

The proposed Legislative Amendment to the LDC includes a large amount of text changes. A description of the proposed text changes is contained below and divided into the following five categories:

- **A. Global Changes**
- **B. Article I (General Provisions) - Chapters 1.0 through 1.6;**
- **C. Article II (Administrative Procedures) - Chapters 2.0 through 2.19;**
- **D. Article III (Use Classifications and Zoning Districts) - Chapters 3.0 through 3.37; and**
- **E. Article IV (Development Standards) - Chapters 4.0 through 4.14.**

The complete proposed text changes involved in this Legislative Amendment to the LDC are included as **Attachment A**.

A. GLOBAL CHANGES

Apply the changes described below in Articles I through IV of the LDC *globally* (i.e., to all parts of the LDC) to ensure consistent terminology and requirements. Chapter 1.1 - The City Council and Its Agencies and Officers, Chapter 1.2 - Legal Framework, and Chapter 1.3 - Enforcement all contain examples of "global changes" in that they now contain references to Floodplain Development Permits, the Floodplain Administrator or designee, etc. Another example of such "global changes" is the relocation of the landslide hazards and hillside development standards from Chapter 4.5 to a new chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist

both internal and external customers find the appropriate Code sections more easily. However, this change also resulted in the need to change the name of the chapter and all the related Code section numbers in all the areas of the Code that address landslide hazards and hillside development.

The renaming of Chapter 4.5 - Floodplain Provisions from Chapter 4.5 - Natural Hazards and Hillside Development to Chapter 4.5 - Floodplain Provisions required a "global change" to correct the chapter name and section number references throughout the Code. New definitions in Chapter 1.6 - Definitions created a need to correct terminology throughout the Code. The creation of a new Chapter 2.11 - Floodplain Development Permit brought out the need to reference this chapter and its requirements, where appropriate, throughout the Code. These examples are just a few of the "global" types of changes that needed to occur as the result of this Legislative Amendment to the LDC.

B. ARTICLE I (GENERAL PROVISIONS) - CHAPTERS 1.4 AND 1.6

Proposed amendments to Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions are due to federally required changes to existing definitions, as well as the addition of newly defined terms to Chapter 1.6. Within Chapter 1.4 - Nonconforming Development, the provisions related to the alteration or repair of a nonconforming structure have been changed to reflect modifications to the definitions of Substantial Improvement and Substantial Damage. The regulatory language addressing these situations has also been changed to directly refer to standards in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, rather than describing the scope of improvements required when structures are located in the 100-year Floodplain.

In some cases, the federal regulations require definitions that are different from those of terms already contained in Chapter 1.6. For example, the term *"Development"* is defined by the federal NFIP regulations using language that is notably different from how it is currently defined in Chapter 1.6. Achieving consistency with the federal NFIP regulations requires the adoption of the definitions they contain. This resulted in the need to clarify how and when a term with two different definitions applied to various portions of the LDC. Staff's solution was to create a new Section 1.6.40 in Chapter 1.6 - Definitions. This new Section 1.6.40 contains terms and their definitions that <u>only</u> apply to development within the 100-year Floodplain. However, there are terms outside of Section 1.6.40 that apply to development within the 100-year Floodplain, but <u>also</u> apply to development elsewhere within the community. In these instances, modifications to the existing definitions were made, where necessary, but the term was retained in the main list of definitions in Section 1.6.30.

C. ARTICLE II (ADMINISTRATIVE PROCEDURES) - CHAPTERS 2.0 THROUGH 2.19

Article II contains the provisions for each land use application type; from Annexations to Property Line Adjustments. Besides making the global changes necessary to reflect consistency with the primary chapters affected by the 100-year Floodplain

amendments, Article II is proposed for expansion through the addition of Chapter 2.11 - Floodplain Development Permit.

As noted above, Chapter 2.11 - Floodplain Development Permit contains the procedural requirements for the issuance of Floodplain Development Permits. These permits will be processed administratively by Staff, similar to a building permit, and be subject to review criteria contained in both the LDC and the State Building Code. Chapter 4.5 - Floodplain Provisions contains the LDC criteria that must be assessed prior to issuance of each Floodplain Development Permit, unless an applicant is also seeking approval of a Floodplain Development Permit Variance.

The federal NFIP regulations allow local jurisdictions to grant Floodplain Development Permit Variances to the minimum federally required standards, but only under very restricted circumstances. The number of Floodplain Development Permit Variances that the City grants will be monitored by FEMA. If too many Floodplain Development Permit Variances are granted, it can negatively affect the City's flood insurance rating and raise flood insurance rates for property owners. To grant a Floodplain Development Permit Variance, a local jurisdiction must base its decision on criteria specified in the federal NFIP regulations at a minimum. Chapter 2.11 - Floodplain Development Permit contains the Floodplain Development Permit Variance provisions and the federally required Floodplain Development Permit Variance criteria. However, Staff have intentionally structured the review of a Floodplain Development Permit Variance to also include an assessment of its consistency with applicable provisions from LDC Chapter 4.5 - Floodplain Provisions. It is recommended that the Land Development Hearings Board review Floodplain Development Permit Variance requests, as well as appeals of standard Floodplain Development Permits.

It should be noted that the existing LDC provisions allow for floodplain development standards to be varied through the Planned Development process. The addition of a Floodplain Development Permit Variance process does not supplant the opportunity for seeking deviations through the Planned Development process, but rather defines a limited scope of Floodplain Development Permit Variances that must be processed using the provisions in Chapter 2.11 - Floodplain Development Permit. Any Floodplain Development Permit Variance request that exceeds this limited scope would continue to be handled through the Planned Development process. Amendments to LDC Chapter 2.5 - Planned Development have been made consistent with this approach and additional floodplain review criteria have been added to ensure consistency with the federal NFIP floodplain regulations.

D. ARTICLE III (USE CLASSIFICATIONS AND ZONING DISTRICTS) - CHAPTERS 3.0 THROUGH 3.38

The only changes made to Chapters 3.0 through 3.38 are global in nature, and are required to maintain consistency with terms or section references from the primary LDC chapters affected by the proposed 100-year Floodplain amendments.

E. ARTICLE IV (DEVELOPMENT STANDARDS) - CHAPTERS 4.0 THROUGH 4.14

Article IV contains all of the development standards not otherwise captured by chapters from Article III. These provisions cover such things as public improvements, parking, landscaping, lighting, solar access, signs, parking, pedestrian oriented design standards, natural resources and natural hazards, and Minimum Assured Development Area (MADA). While global changes to some of the chapters in Article IV were necessary to reflect consistency with the primary chapters affected by the proposed 100-year Floodplain amendments, the most significant modifications are contained in Chapter 4.5 - Natural Hazard and Hillside Development Provisions. The chapter name was changed to Chapter 4.5 - Floodplain Provisions and all provisions pertaining to landslide hazards and hillsides were relocated to a newly created chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Amendments to Chapter 4.11 - Minimum Assured Development Area are also proposed to reflect new provisions in Chapter 4.5 - Floodplain Provisions that clarify how MADA applies to areas of High Protection Floodway Fringe.

Extensive amendments are proposed to Chapter 4.5 - Floodplain Provisions. These effect every major section of the Chapter, including those that contain its purposes, applicability, procedures, construction standards, and provisions for map refinements and map corrections. New sections have also been added to address the federal NFIP requirement of designating a Floodplain Administrator, and to stipulate development standards for Critical Facilities, fences and walls, storage tanks, on-site sewage systems (e.g., septic systems), and temporary structures and storage. New provisions are also proposed that would regulate the conversion of potentially habitable spaces located at an elevation below the Base Flood Elevation.

CRITERIA, DISCUSSION, AND CONCLUSIONS

Applicable Comprehensive Plan Policies:

1.2 Local Planning Process

Implementation Tools:

The Comprehensive Plan is implemented through the variety of mechanisms mentioned below:

- **Plans are officially adopted documents used to focus long-range planning for either specific areas or the entirety of the Urban Growth Boundary. Examples of plans include the Comprehensive Plan, facility plans, master plans, and specific area plans.**

- **Regulations include the standards and procedures (see Figure 1.2 - Typical Development Review Process) contained in the Land Development Code and other ordinances. These apply to all land use requests such as land divisions, re-zoning of land, and site development.**

- **The Land Development Code (LDC) is a set of regulations that ensures development is of the proper type, design, and location, and is served by a proper range of public facilities and services. The LDC also ensures**

that development is in all respects consistent with the goals and policies of the Corvallis Comprehensive Plan.

1.2.1 The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.

Additional applicable Comprehensive Plan Policies will be referenced by Policy number throughout this discussion. Actual Text regarding these Comprehensive Plan Policies is contained in **Attachment F** and in the City's Comprehensive Plan. The Comprehensive Plan may be viewed on the City's web site (www.ci.corvallis.or.us/cd/pl/ldcupdate.html), at the Corvallis Public Library (located at 645 NW Monroe Avenue), and at the Corvallis Planning Division office (located temporarily at 2300 NW Walnut Boulevard).

Applicable Land Development Code Sections:

Section 1.2.80 - Text Amendments

1.2.80.01 - Background

This Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies.

1.2.80.02 - Initiation

Initiation of an amendment may be accomplished by one of the following methods:

a. Majority vote of the City Council; or

b. Majority vote of the Planning Commission.

1.2.80.03 - Review of Text Amendments

The Planning Commission and City Council shall review proposed amendments in accordance with the legislative provisions of Chapter 2.0 - Public Hearings.

The primary issues to be addressed by this effort are the requirements that the City of Corvallis must adopt and enforce federally mandated 100-year Floodplain regulations in order to maintain its NFIP eligibility and, by doing so, remain consistent with applicable Statewide Planning Goals and the Comprehensive Plan. As noted above, the existing LDC provisions currently address many of the federal regulatory NFIP requirements. However, not every mandated element of the federal regulations is currently implemented by the LDC. The creation of a Floodplain Development Permit is an example. To the extent that the current LDC provisions are not consistent with the minimum federal NFIP regulations, the LDC is also inconsistent with the Comprehensive Plan. The proposed amendments would resolve these areas of regulatory inconsistency, to the benefit of public necessity, convenience, and general welfare.

The proposed Legislative Amendment to the LDC is reviewed below against the applicable Comprehensive Plan Policies and LDC procedural criteria. The discussion regarding the applicable Statewide Planning Goals is included at the end, following an analysis of how the

proposed amendments are consistent with the City's Comprehensive Plan and LDC criteria. The discussion is organized into the following six categories:

A. Global Changes
B. Article I (General Provisions) - Chapters 1.0 through 1.6
C. Article II (Administrative Procedures) - Chapters 2.0 through 2.19
D. Article III (Use Classifications & Zoning Districts) - Chapters 3.0 through 3.37
E. Article IV (Development Standards) - Chapters 4.0 through 4.10; and
F. Statewide Planning Goal Analysis

A. GLOBAL CHANGES

As mentioned, Comprehensive Plan Policy 1.2.1 states:

> **1.2.1 The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.**

In addition, Code Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* As part of the proposed Legislative Amendment to the LDC, many "global changes" will be incorporated. These "global changes" will ensure consistency among the LDC's terminology and requirements, and maintain accurate cross-references between related chapters. With the incorporation of all the text changes outlined in Sections "B - E," below, many inconsistencies and/or conflicts with remaining text would be created otherwise.

Conclusion: Eliminating identified conflicts and maintaining a consistent use of terminology, both within the LDC and between the LDC and the Comprehensive Plan, is a public necessity for the public convenience and general welfare associated with the general use of the Code. Given the above, incorporation of the proposed "global changes" is consistent with Comprehensive Plan Policy 1.2.1 and Code Section 1.2.80.01.

B. ARTICLE I (GENERAL PROVISIONS) - Chapters 1.0 THROUGH 1.6

Chapter 1.0 - Introduction (no changes needed)
Chapter 1.1 - The City Council and Its Agencies and Officers
Chapter 1.2 - Legal Framework
Chapter 1.3 - Enforcement
Chapter 1.4 - Nonconforming Development
Chapter 1.5 - Reserved
Chapter 1.6 - Definitions

As mentioned, Comprehensive Plan Policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, Code Section 1.2.80.01 states that the *"Code*

may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies." Consistent with these citations, changes proposed for LDC Article I are a reflection of the need to bring the LDC into conformance with the Comprehensive Plan, as well a need to correct legal issues associated with terminology. Substantive changes involve Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions, and are as follows:

1. <u>Chapter 1.4 - Nonconforming Development:</u>

Substantial Improvement and Substantial Damage of a Nonconforming Structure Development Within the 100-Year Floodplain:

The current federal NFIP definitions of Substantial Damage and Substantial Improvement relate to one another and specify how the market value of a structure shall be determined. The existing LDC definitions of these terms do not contain this requirement, but are proposed to be modified consistent with the federal definitions as part of amendments to Chapter 1.6. Many of the standards contained within Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions utilize the terms Substantial Improvement and/or Substantial Damage to ensure that nonconforming structures within the 100-year Floodplain are eventually brought into conformance with current development standards. The existing provisions in Chapter 1.4 - Nonconforming Development specifically describe the improvements that must be made to a nonconforming structure to which Substantial Improvement will occur, or to which Substantial Damage has occurred. The proposed amendments simplify this requirement by simply cross-referencing Chapters 2.11 and 4.5, which will improve the regulatory efficiency of the LDC, and, over time, ensure that property owners have a clear understanding of the associated requirements.

The existing definitions for Substantial Damage and Substantial Improvement include a market value threshold of 50 percent that is the basis for determining whether a structure has sustained Substantial Damage, or will undergo Substantial Improvement. The existing definition for Substantial Damage notes that the 50 percent threshold can be met or exceeded based on damage sustained during two flood events that occur over a 10-year period. The definition for Substantial Improvement contains no qualification for how the 50 percent threshold is determined. As proposed, the new definition for Substantial Damage eliminates the opportunity to cumulatively meet or exceed the 50 percent threshold over a 10-year period. Doing so allows for more consistent application with the related requirements of Substantial Improvement.

Staff note that the federal NFIP regulations do not specify whether or how a local jurisdiction should track cumulative improvements or damages to a nonconforming structure within the 100-year Floodplain. The current Code definition for Substantial Damage does contain such a provision. Although it

may be more efficient and cost-effective from a regulatory perspective to not track cumulative damage for improvement, there is also the issue of such cumulative activities eventually surpassing the 50 percent threshold without mandating that the entire structure be brought into conformance with floodplain development standards. Staff have considered these trade-offs in light of current budgetary constraints, and concluded that tracking cumulative damage and/or improvement is not warranted at this time. Despite the language of the existing definition, Staff do not currently track cumulative damage, per these provisions.

Conclusions Regarding Chapter 1.4 Changes: Section 1.2.80.01 of the LDC states that the Code may be amended whenever the public necessity, convenience, and general welfare require such amendment. The modification of these development standards is a public necessity to address the public's convenience. Therefore, the addition of these development standards is consistent with Comprehensive Plan Policy 1.2.1 and LDC Section 1.2.80.01.

2. Chapter 1.6 - Definitions:

Amending the LDC to be consistent with federal NFIP floodplain regulations requires the revision of definitions for some existing terms currently defined in Chapter 1.6 - Definitions, as well as the addition of new terms and their definitions. The adoption of these definitions is essential for proper implementation of the federal NFIP floodplain regulations, and is a requirement that must be satisfied in order to maintain the City's NFIP eligibility and demonstrate consistency with applicable Statewide Planning Goals.

Conclusions Regarding Chapter 1.6 - Definitions Changes: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to LDC Chapter 1.6 - Definitions are a public necessity to create a clear understanding of terminology within the LDC. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and with LDC Section 1.2.80.01.

C. ARTICLE II (ADMINISTRATIVE PROCEDURES) - Chapters 2.0 -THROUGH 2.19

Chapter 2.0 - Public Hearings
Chapter 2.1 - Comprehensive Plan Amendment Procedures
Chapter 2.2 - Development Zone Changes
Chapter 2.3 - Conditional Development
Chapter 2.4 - Subdivisions and Major Replats
Chapter 2.5 - Planned Development
Chapter 2.6 - Annexations
Chapter 2.7 - Extension of Services Outside the City Limits
Chapter 2.8 - Vacating of Public Lands and Plats (no changes needed)
Chapter 2.9 - Historic Preservation Provisions (no changes needed)
Chapter 2.10 - Major Neighborhood Center Master Site Plan Requirements

Chapter 2.11 - (NEW) Floodplain Development Permit
Chapter 2.12 - Lot Development Option
Chapter 2.13 - Plan Compatibility Review
Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments
Chapter 2.15 - Reserved
Chapter 2.16 - Request for Interpretation (no changes needed)
Chapter 2.17 - Reserved
Chapter 2.18 - Solar Access Permits (no changes needed)
Chapter 2.19 - Appeals

As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, Code Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Consistent with Comprehensive Plan Policy 1.2.1 as quoted above and LDC Section 1.2.80.01, changes proposed for LDC Article II are a reflection of the need to bring the LDC into conformance with the federal NFIP floodplain regulations, the Statewide Planning Goals, and the Comprehensive Plan. The proposed amendments maintain uniformity in application requirements and review criteria for those types of land use requests through which consideration of development within the 100-year Floodplain, landslide hazard areas, and hillsides is mandated. Lastly, given the creation of Chapter 2.11, - Floodplain Development Permit, the substantial amendments to Chapter 4.5 - Floodplain Provisions, and the relocation of landslide hazard and hillside standards to Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, the proposed amendments ensure that accurate section cross-references are maintained among all of the affected LDC chapters.

Except for Chapters 2.5 and 2.11, for which the proposed amendments are discussed in greater detail below, the only other modification that is necessary to chapters within Article II is the correction of references to altered section numbers in Chapter 4.5 - Floodplain Provisions, and the addition of required adherence to the new Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. These changes occur in the lists of application requirements and review criteria contained in Chapters 2.1 through 2.7, Chapter 2.10 - Major Neighborhood Center Master Site Plan Requirements, and Chapters 2.11 through Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments, and 2.19. Substantive changes involve Chapter 2.5 - Planned Development and Chapter 2.11 - Floodplain Development Permit, and are discussed in items "2," and "3," below:

1. <u>Application Requirements & Additional Review Criteria:</u>

Applicable Comprehensive Plan Policies:

Policies containing elements associated with application materials and the preservation of significant natural features include Policies 3.2.1, 3.2.7, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 7.2.1, 7.2.2., 7.2.3, 7.2.6, 7.5.2,

7.5.4, 7.5.5, 7.6.4, 10.2.9, 10.7.1, 11.2.1, 11.2.12, and the floodplain Policies within Comprehensive Plan Article 4. See Attachment F.

The Policies within Article 4 and Policies 3.2.1, 3.2.7, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 7.2.1, 7.2.2., 7.2.3, 7.2.6, 7.5.2, 7.5.4, 7.5.5, 7.6.4, 10.2.9, 10.7.1, 11.2.1, 11.2.12 emphasize the preservation of significant open space and natural features, the minimization of environmental impacts and impervious surfaces, and the protection of floodplain functions. The application requirements throughout the LDC Chapters regarding land use application types currently require applications to include information on natural features that occupy a development site. Applicants are also required to demonstrate how a given proposal is consistent with applicable standards pertaining to the protection of the natural resources and natural hazards, such as the 100-year Floodplain. Given the breadth of changes proposed to Chapter 4.5 - Floodplain Provisions and the creation of Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, it is necessary to make corresponding amendments to the list of application requirements and review criteria contained in each of the planning procedure chapters in Article II of the LDC. These changes will assure consistency with the cited Comprehensive Plan Policies.

Conclusion Regarding Application Requirement and Review Criteria Changes: The proposed changes regarding application requirements and supplemented review criteria in Article II will require developments to supply information about, and develop designs in compliance with, floodplain development requirements. Staff find that the floodplain development requirements, as referenced within Article II of the proposed LDC, are consistent with the Comprehensive Plan Policies within Article 4, and Policies 3.2.1, 3.2.7, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 7.2.1, 7.2.2., 7.2.3, 7.2.6, 7.5.2, 7.5.4, 7.5.5, 7.6.4, 10.2.9, 10.7.1, 11.2.1, and 11.2.12.

2. Chapter 2.5 - Planned Development:

Applicable Comprehensive Plan Policies:

Policies containing elements associated with the protection of the 100-year Floodplain include Policies 3.2.1, 3.2.7, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 7.2.1, 7.2.2., 7.2.3, 7.2.6, 7.5.2, 7.5.4, 7.5.5, 7.6.4, 10.2.9, 10.7.1, 11.2.1, 11.2.12, and the floodplain Policies within Comprehensive Plan Article 4. See Attachment F.

Revisions to Review Criteria for Planned Developments: As mentioned above, Chapter 2.11 - Floodplain Development Permit is proposed to contain a Floodplain Development Permit Variance process that is particular to Floodplain Development Permits and limited in scope to only certain standards. Currently, the LDC allows floodplain development standards contained in Chapter 4.5 - Natural Hazard and Hillside Development Provisions to be varied through the Planned Development process. This ability will remain for those standards not addressed by the Floodplain Development Permit Variance process contained

in Chapter 2.11 - Floodplain Development Permit. However, it is reasonable that the review of a Planned Development request involving floodplain development standards consider the decision criteria for a Floodplain Development Permit Variance in addition to the Planned Development compatibility criteria. In order to review such a Planned Development request against the Floodplain Development Permit Variance criteria, the application needs to contain the same information required for a Floodplain Development Permit Variance. Sections 2.5.40.01, 2.5.40.04, 2.5.60.02, and 2.5.90.04 are proposed to be modified accordingly.

Conclusions Regarding Chapter 2.5 - Planned Development: As mentioned, Comprehensive Plan Policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, LDC Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* The proposed changes to LDC Sections 2.5.40.01, 2.5.40.04, 2.5.60.02, and 2.5.90.04 allow the Planned Development process to be used to request deviations to the floodplain development standards, but do so in a manner that meets the level of scrutiny expected by the associated federal NFIP regulations. Processing Planned Development requests in this manner is consistent with the purposes of a Planned Development by affording flexibility when its deemed appropriate, while remaining responsive to the Comprehensive Plan Policies cited above that address the protection of natural features including the 100-year Floodplain. Given the above, these proposed revisions are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

3. *NEW* Chapter 2.11 - Floodplain Development Permit:

Applicable Comprehensive Plan Policies:

> **Policies containing elements associated with the protection of the 100-year Floodplain include Policies 3.2.1, 3.2.7, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 7.2.1, 7.2.2., 7.2.3, 7.2.6, 7.5.2, 7.5.4, 7.5.5, 7.6.4, 10.2.9, 10.7.1, 11.2.1, 11.2.12, and the floodplain Policies within Comprehensive Plan Article 4.**

The federal NFIP floodplain regulations require local jurisdictions participating in NFIP to track development within the 100-year Floodplain through issuance of Floodplain Development Permits. Such permits must be issued independent of any other required permit (e.g., building permits or land use decisions), and must be permanently retained on file for later reference. The approval or denial of a Floodplain Development Permit must be based, at a minimum, on demonstrated consistency with the applicable federal NFIP floodplain development standards. These standards address residential and nonresidential development occurring within the 100-year Floodway Fringe and

within the Floodway, as well as other accessory forms of development occurring inside of the 100-year Floodplain.

As discussed in more detail below, LDC Chapter 4.5 - Floodplain Provisions is proposed to be extensively modified so that the regulatory framework it contains is in full conformance with the federal NFIP standards. The proposed new LDC Chapter 2.11 - Floodplain Development Permit will work in tandem with Chapter 4.5 - Floodplain Provisions to ensure that all federally regulated forms of development occurring within the 100-year Floodplain are documented and consistent with both the federal and local floodplain regulations, thereby satisfying one aspect of the City of Corvallis's responsibilities as a participating NFIP community. Issuance of Floodplain Development Permits will also result in forms of development within the 100-year Floodplain that support the Comprehensive Plan Policies cited above. The standards contained in Chapter 4.5 - Floodplain Provisions have been drafted to comply with those policies. The following discussion addresses how provisions from the new Chapter 2.11 - Floodplain Development Permit also achieve this goal.

(a) ***Chapter 2.11 - Sections 2.11.10 and 2.11.20, Background and Purposes:*** As with other planning procedure chapters in Article II, the background and purposes of Chapter 2.11 - Floodplain Development Permit establish the basis and intent behind implementing this regulatory aspect of the LDC. Many of these purpose statements are shared by Chapter 4.5 - Floodplain Provisions, which are in turn taken from the most recent draft of the Oregon Model Floodplain Development Ordinance.

Conclusions Regarding Sections 2.11.10 and 2.11.20: As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, LDC Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Sections 2.11.10 and 2.11.20 provide necessary guidance to Staff and potential applicants as to the intent of Chapter 2.11 - Floodplain Development Permit, and help frame the associated regulatory process. This guidance benefits the convenience and general welfare of the community by clearly describing the expected outcomes. Therefore, the proposed changes are consistent with the Policies of the Comprehensive Plan and with Land Development Code Section 1.2.80.01 - Background.

(b) ***Chapter 2.11 - Floodplain Development Permit - Sections 2.11.30 and 2.11.40, Applicability and Exemptions:*** Sections 2.11.30 and 2.11.40 work together to clarify which types of Development must be approved through the Floodplain Development Permit process and which activities are exempt. In general, most forms of Development within the 100-yr. Floodplain, as defined in the proposed LDC Section 1.6.40, will

require a Floodplain Development Permit. Exceptions include very limited amounts of fill, fences and walls erected in specific areas of the 100-year Floodplain with documented flood velocities of less than five ft. per second, certain types of maintenance performed on existing infrastructure or structures, and other specific activities that have been found to cause negligible affects on floodplain function.

The exemption for limited amounts of fill was developed based on guidance from FEMA Region X and DLCD. Staff from these agencies tried to address common backyard landscaping and gardens by stating that the alteration of existing topography is considered insignificant so long as the change is small in scope and results in a deposition of fill with an average depth of no more than six inches. Section 2.11.40 addresses the “small in scope” concept by limiting the small amount of fill to residential zones, and limiting the area that new fill could cover, with the intended goal of exempting the types of landscape features noted in Section 2.11.40 from regulatory requirements.

Issuing Floodplain Development Permits for fences and walls is not a new regulatory expectation. Documentation from FEMA Region X dated August, 10, 1977, notes the practical ramifications of having to issue a Floodplain Development Permit for a three-foot tall picket fence. Regardless of the frustrations potentially experienced by property owners and the local permitting authority, fences and walls do have the potential to obstruct and redirect flood waters, causing adverse impacts on adjacent properties. Thus, in updating the existing floodplain development standards in Chapter 4.5 - Floodplain Provisions, staff explored how best to provide some regulatory relief for property owners.

Through coordination with DLCD and FEMA, a flood water velocity of five (5) feet per second (fs) was determined to be an appropriate threshold for whether to require a Floodplain Development Permit for a fence or wall. As indicated by Section 2.11.40.b, fences and walls constructed in areas of the 100-year Floodplain with a flood water velocity of less than 5 fs are not anticipated to have a significant impact on floodplain function, as the force of the water will typically be insufficient to displace a fence or a wall, and the rate of flood water inundation is gradual and uniform enough to preclude such structures from influencing the flow of flood waters. As such, there is no need to prescribe specific design standards for fences and walls constructed in these areas of the 100-year Floodplain. In areas of the 100-year Floodplain with flood water velocities of 5 fs or greater, fences and walls will be allowed through approval of a Floodplain Development Permit and constructed consistent with the standards presented in LDC Section 4.5.110.12. The Flood Insurance Study (FIS) for Benton County includes water velocity speeds in feet per second (fs) for all the floodplain areas studied by FEMA. For areas not yet studied by FEMA, applicants would have the option of either: 1) obtaining a Floodplain

Development Permit and complying with the design standards in Section 4.5.110.12; or 2) obtaining the water velocity speed by conducting a study and then following the appropriate path. Please see the discussion on Chapter 4.5 - Floodplain Provisions, below, for more information about the design standards for fences and walls.

The remaining activities exempted from Floodplain Development Permit approval have been reviewed by DLCD and FEMA, and were found to be so minor as to cause negligible affects on floodplain function. For those items pertaining to the maintenance of existing infrastructure or structures, such activities must conform to the general threshold of not intensifying the degree or extent of development occurring within the 100-year Floodplain.

Conclusions Regarding Sections 2.11.30 and 2.11.40: As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, LDC Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Sections 2.11.30 and 2.11.40 provide clear direction to potential Floodplain Development Permit applicants and Staff about when such permits are necessary prior to initiating Development. Those activities that are exempted from the Floodplain Development Permit process have been found to cause negligible affects on floodplain function so long as the thresholds used as the basis for exemption are met. In those instances, the exempted activities can be allowed without concern for undermining the Comprehensive Plan Policies cited above, as the magnitude of development is so minor that the application of floodplain development standards in Chapter 4.5 - Floodplain Provisions is unnecessary. Additionally, the proposed exemptions are necessary to eliminate the inconvenience of having to obtain Floodplain Development Permits for activities that have little to no impact on floodplain function, which ultimately improves the public's general welfare. Therefore, the proposed changes are consistent with the Policies of the Comprehensive Plan and with Land Development Code Section 1.2.80.01 - Background.

(c) ***Chapter 2.11 - Floodplain Development Permit - Section 2.11.50, Procedures:*** Each planning procedure regulated through LDC Article II contains sections that stipulate the associated application requirements, review process, issuance of decision, etc. However, the procedural elements proposed for the Floodplain Development Permit are designed so that the permit process will be very similar to that of a building permit. The application requirements and review criteria for a Floodplain Development Permit are structured to specifically address the purposes of Chapters 2.11 and 4.5, which, essentially, are to allow reasonable forms of development within the 100-year Floodplain that do not result in an unacceptable risk to life or property. In fact, most of the review

criteria listed in Section 2.11.50.04 are taken directly from the federal NFIP floodplain regulations and the most recent draft of the Oregon Model Floodplain Development Ordinance.

Some of the procedural elements contained in Section 2.11.50 are unique to Floodplain Development Permits due to the federal NFIP floodplain regulations and/or State Building Code. For example, Section 2.11.50.06 requires an applicant to provide elevation certificates at certain points during the construction process, while Section 2.11.50.08 notes that all Floodplain Development Permit applications shall be permanently retained on file by the local Floodplain Administrator (see discussion on Chapter 4.5 - Floodplain Provisions for more information). Lastly, Section 2.11.50.11 stipulates that a Floodplain Development Permit approval is effective for a period of 180 days, which is significantly less than the effective period for most land use applications. The federal NFIP floodplain regulations intentionally limit the period of approval to 180 days so there is less potential for development to occur in a manner that is inconsistent with NFIP floodplain regulations as they are updated over time.

Conclusions Regarding Section 2.11.50: As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, LDC Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Section 2.11.50 mirrors the procedural framework used in other types of administrative land use requests, and incorporates mandatory provisions from the federal NFIP floodplain regulations and State Building Code. Using a format that is similar to other planning procedures facilitates an efficient implementation of this new permitting program, which benefits the general public and Staff. The use of review criteria from the most recent draft of the Oregon Model Floodplain Development Ordinance and the federal NFIP regulations ensures that development occurring in conformance with approved Floodplain Development Permits will comply with the federal NFIP regulations and, at the same time, support the Comprehensive Plan Policies cited above. Therefore, the proposed changes are consistent with the Policies of the Comprehensive Plan and with Land Development Code Section 1.2.80.01 - Background.

(d) ***Chapter 2.11 - Section 2.11.60, Floodplain Development Permit Variance:*** The Floodplain Development Permit Variance procedure established through Section 2.11.60 is structured much like the typical Floodplain Development Permit application process. However, instead of being processed Ministerially like a building permit, the application process for a Floodplain Development Permit Variance requires a public hearing before the Land Development Hearings Board. The public hearing is required because of the discretionary nature of the

accompanying review criteria. Federal NFIP floodplain regulations stipulate that if a local jurisdiction allows Floodplain Development Permit Variances, they must be limited in scope to the items listed in Section 2.11.60.01, and be reviewed, at a minimum, against the criteria contained in Section 2.11.60.06, parts "a," through "d." Staff have included the additional decision criteria recommended by the most recent draft of the Oregon Model Floodplain Development Ordinance to ensure that Floodplain Development Permit Variance requests are reviewed against the full set of floodplain development standards that would apply to a typical Floodplain Development Permit. Doing so will establish a strict regulatory standard for those limited Floodplain Development Permit Variance approvals that do fall within the scope allowed through Section 2.11.60.01, and further limit the potential for unexpected consequences stemming from Floodplain Development Permit Variance approvals.

Conclusions Regarding Section 2.11.60: As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, LDC Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Section 2.11.60 provides the potential for remedying unique situations in which compliance with the applicable floodplain development standards cannot be achieved due to extraordinary circumstances. The Floodplain Development Permit Variance process is expected to be used infrequently, based on the limited scope of Floodplain Development Permit Variances allowed and the strict, discretionary decision criteria that must be satisfied. Regardless of these regulatory constraints, incorporating the Floodplain Development Permit Variance process with the other floodplain development standards and procedures proposed through these amendments meets a public necessity by acknowledging the potential for unanticipated development scenarios. Rather than confounding applicants who find themselves in such a situation, the Floodplain Development Permit Variance process will provide alternate development solutions to the benefit of public welfare. Therefore, the proposed changes are consistent with the Policies of the Comprehensive Plan and with Land Development Code Section 1.2.80.01 - Background.

D. ARTICLE III (USE CLASSIFICATIONS & ZONING DISTRICTS) - Chapters 3.0 THROUGH 3.37

Chapter 3.0 - Use Classifications (no changes proposed)
Chapter 3.1 - RS-3.5 (Low Density) Zone
Chapter 3.2 - RS-5 (Low Density) Zone
Chapter 3.3 - RS-6 (Low Density) Zone
Chapter 3.4 - RS-9 (Medium Density) Zone
Chapter 3.5 - RS-9(U) (Medium Density - University) Zone
Chapter 3.6 - RS-12 (Medium High Density) Zone
Chapter 3.7 - RS-12(U) (Medium High Density - University) Zone
Chapter 3.8 - RS-20 (High Density) Zone
Chapter 3.9 - MUR (Mixed Use Residential) Zone
Chapter 3.10 - Reserved
Chapter 3.11 - P-AO (Professional and Administrative Office) Zone
Chapter 3.14 - NC (Neighborhood Center) Zone
Chapter 3.15 - RF (Riverfront) Zone
Chapter 3.16 - CB (Central Business) Zone
Chapter 3.17 - CBF (Central Business Fringe) Zone
Chapter 3.18 - Reserved
Chapter 3.19 - MUCS (Mixed Use Community Shopping) Zone
Chapter 3.20 - MUGC (Mixed Use General Commercial) Zone
Chapter 3.21 - MUT (Mixed Use Transitional) Zone
Chapter 3.22 - LI-O (Limited Industrial - Office) Zone
Chapter 3.23 - LI (Limited Industrial) Zone
Chapter 3.24 - GI (General Industrial) Zone
Chapter 3.25 - II (Intensive Industrial) Zone
Chapter 3.26 - RTC (Research Technology Center) Zone
Chapter 3.27 - MUE (Mixed Use Employment) Zone
Chapter 3.28 - Reserved
Chapter 3.29 - Reserved
Chapter 3.30 - WRG (Willamette River Greenway) Zone Overlay
Chapter 3.31 - HPO (Historic Preservation Overlay) Zone (no changes proposed)
Chapter 3.32 - PD (Planned Development) Zone Overlay (no changes proposed)
Chapter 3.33 - Reserved
Chapter 3.34 - Reserved
Chapter 3.35 - Reserved
Chapter 3.36 - OSU (Oregon State University) Zone
Chapter 3.37 - AG-OS (Agriculture - Open Space) Zone
Chapter 3.38 - C-OS (Conservation - Open Space) Zone

The only changes made to chapters in Article III are global in nature, and are required to maintain consistency with terms or section references from the primary LDC chapters affected by the proposed 100-year Floodplain amendments. Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In

addition, Code Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* As part of the proposed Legislative Amendment to the LDC, many "global changes" will be incorporated. These "global changes" will ensure consistency within the LDC's terminology and requirements, and maintain accurate cross-references between related chapters. With the incorporation of all the text changes discussed as part of Articles I, II, and IV, many inconsistencies and/or conflicts with remaining text would be created otherwise.

Conclusion: Eliminating identified conflicts and maintaining a consistent use of terminology, both within the LDC and between the LDC and the Comprehensive Plan, is a public necessity for the public convenience and general welfare associated with the general use of the Code. Given the above, incorporation of the proposed "global changes" is consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

E. ARTICLE IV (DEVELOPMENT STANDARDS) - Chapters 4.0 THROUGH 4.14

Chapter 4.0 - Improvements Required with Development
Chapter 4.1 - Parking, Loading, and Access Requirements
Chapter 4.2 - Landscaping, Buffering, Screening & Lighting
Chapter 4.3 - Accessory Development Standards (no changes proposed)
Chapter 4.4 - Land Division Standards
Chapter 4.5 - (New) Floodplain Provisions
Chapter 4.6 - Solar Access
Chapter 4.7 - Sign Regulations
Chapter 4.8 - Manufactured Dwelling Park Standards
Chapter 4.9 - Additional Provisions
Chapter 4.10 - Pedestrian Oriented Design Standards
Chapter 4.11 - Minimum Assured Development Area
Chapter 4.12 - Significant Vegetation Protection Provisions (no changes proposed)
Chapter 4.13 - Riparian Corridor and Wetland Provisions
Chapter 4.14 - (NEW) Landslide Hazard and Hillside Development Provisions

As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, Code Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Consistent with Comprehensive Plan Policy 1.2.1 as quoted above and LDC Section 1.2.80.01, changes proposed for LDC Article IV are a reflection of the need to bring the LDC into conformance with the federal NFIP floodplain regulations, the Statewide Planning Goals, and the Comprehensive Plan. Except for Chapters 4.5 and 4.14, for which the proposed amendments are discussed in greater detail below, the only other modification necessary to chapters within Article IV is the correction of terminology and references to sections in Chapter 2.11 -

Floodplain Development Permit, Chapter 4.5 - Floodplain Provisions, and the addition of cross-references to Chapter 4.14 - Landslide Hazard and Hillside Development Provisions to maintain previous links to the landslide hazard and hillside development provisions that were contained in Chapter 4.5. Substantive changes involve Chapter 4.5 and the new Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, and are discussed in items "1," and "2," below.

1. <u>Chapter 4.5 - Floodplain Provisions:</u>

Applicable Comprehensive Plan Policies:

Policies containing elements associated with the protection of the 100-year Floodplain include Policies 3.2.1, 3.2.7, 6.2.1, 6.2.2, 6.2.7, 6.2.8, 7.2.1, 7.2.2., 7.2.3, 7.2.6, 7.5.2, 7.5.4, 7.5.5, 7.6.4, 10.2.9, 10.7.1, 11.2.1, 11.2.12, and the floodplain Policies within Comprehensive Plan Article 4. See Attachment F.

(a) ***Chapter 4.5 - Global Change to Remove Text Related to Landslide Hazards and Hillside Development:*** Throughout this chapter, text related to landslide hazards and hillside development has been removed and relocated to the new Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. These changes occurred because those subject matters should be housed in their own chapter to make those Code sections easier for customers to find and use. The remaining provisions in Chapter 4.5 pertain only to floodplain standards. Thus, Chapter 4.5 has been renamed from Chapter 4.5 - Natural Hazards and Hillsides Provisions to Chapter 4.5 - Floodplain Provisions. Additionally, since federal NFIP floodplain regulations require a floodplain management ordinance, having only floodplain provisions located in Chapter 4.5 - Floodplain Provisions and Chapter 2.11 - Floodplain Development Permit makes it easier to demonstrate to FEMA adherence to the federal NFIP floodplain standards;

(b) ***Chapter 4.5 - Floodplain Provisions - Sections 4.5.10 and 4.5.20, Purposes and Applicability:*** As with other chapters in Article IV, the purposes of Chapter 4.5 - Floodplain Provisions (Section 4.5.10) establish the basis and intent behind implementing this regulatory aspect of the LDC. Each of the new or amended purpose statements are shared by Chapter 2.11 - Floodplain Development Permit, which are in turn taken from the most recent draft of the Oregon Model Floodplain Development Ordinance. Section 4.5.20, as proposed, clarifies where within the City Limits the regulations in Chapter 4.5 - Floodplain Provisions apply, identifies the federal Flood Insurance Study and FIRM maps used to determine the location of the 100-year Floodplain, and explains how the proposed floodplain standards coordinate with provisions in other Code chapters and the State Building Code.

The most notable amendments to Section 4.5.20 are:

- the updating of the reference to the Benton County Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Maps (FIRMs) from the current date of July 2, 1984, and January 3, 1985, respectively, to June 2, 2011 (Section 4.5.20.01.b);
- the addition of Floodplain Administrator authority to obtain from applicants the information needed to detect the presence and extent of unmapped Special Flood Hazard Areas SFHAs. This information is required as part of reviewing development proposals that affect the 100-year floodplain. These additional studies pertain to areas that have not yet been studied by FEMA (Section 4.5.20.01.b);
- the express regulatory integration of floodplain standards contained in the State Building Code (Section 4.5.20.02.a); and
- the clarification that Partial Protection Floodplain construction standards must be used when development occurs within High Protection Floodplain areas that are allowed to be developed by the Code's Minimum Assured Development Area (MADA) provisions (Section 4.5.20.03.b).

The federal NFIP program and FEMA require use of the revised FIS and FIRMs for Benton County. The current Land Development Code, federal NFIP floodplain regulations, and the most recent draft of the Oregon Model Floodplain Development Ordinance all require 100-year floodplain areas to be identified. If FEMA has not yet studied an area suspected of containing 100-year Floodplain, then applicants are required to submit this information concurrent with development applications. The City Engineer reviewed portions of the City outside the areas already studied by FEMA. Some of these areas already contain City-mapped 0.2-ft. Floodways and City-mapped streams, while others contained only City-mapped streams. All of these areas contain Riparian Corridors of varying widths, which overlay the streams. The City Engineer determined that any 100-year Floodplain areas in the City that are outside of FEMA-mapped floodplain areas, would be located along stretches of streams that had not yet been studied by FEMA. The Code authority in Section 4.5.20.01.b maintains Staff's ability to require floodplain studies in these unstudied areas to determine the bounds and extent of 100-year Floodplain. Such studies are required concurrent with development.

In the case of the express regulatory integration of floodplain standards contained in the State Building Code (Section 4.5.20.02.a), the proposed amendment reinforces the existing regulatory requirements for floodplain development by notifying applicants that they must demonstrate conformance with additional standards, beyond those contained in the LDC.

The clarification of how MADA affects development in High Protection Floodplain resolves an aspect of the LDC that is currently unclear in the Land Development Code. The City Council's findings and ESEE

Analysis for the Natural Features Project identified areas of the community that were appropriate for Partial Protection Floodplain provisions. In general, these areas included urbanized sections of streams in the City limits and also the SFHAs in the City limits that were associated with the Millrace and Willamette and Marys Rivers. The City Council identified as High Protection Floodplain all the other SFHAs inside the City limits, as well as the SFHAs outside the City limits. Therefore, SFHAs that are either annexed or identified through future floodplain studies need to be designated as High Protection Floodplain to be consistent with the City Council's findings for the Natural Features Project.

Conclusions Regarding Sections 4.5.10 and 4.5.20: As mentioned, Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, LDC Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* The proposed amendments to Sections 4.5.10 and 4.5.20 address aspects of the LDC that must be brought into conformance with applicable federal NFIP floodplain regulations if the City of Corvallis is to maintain its participation in NFIP. The Comprehensive Plan Policies cited above were influenced by the need to comply with the Statewide Planning Goals that pertain to protection of the 100-year Floodplain To the extent that the current LDC provisions are not consistent with the applicable Statewide Planning Goals by way of omitting certain minimum federal regulations, the LDC is also inconsistent with the Comprehensive Plan. The proposed amendments would resolve these areas of regulatory inconsistency, to the benefit of public necessity, convenience, and general welfare. Therefore, the proposed changes are consistent with the Policies of the Comprehensive Plan and with Land Development Code Section 1.2.80.01 - Background.

(c) ***Chapter 4.5 - Floodplain Provisions - Section 4.5.30, Disclaimer of Liability:*** Only minor amendments are proposed to Section 4.5.30, and their primary purpose is to integrate the provisions of Chapter 2.11 - Floodplain Development Permit with the existing disclaimer of liability.

Conclusions Regarding Section 4.5.30: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.30 are a public necessity to create a clear understanding of the regulatory framework within the LDC. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Policy 1.2.1.80.01.

(d) ***Chapter 4.5 - Floodplain Provisions - Section 4.5.40, Findings of Fact, Definitions and Related Standards:*** The proposed amendments

to Section 4.5.40 fall into one of two categories: either they are necessary to demonstrate conformance with federal NFIP floodplain regulations, or they are necessary to maintain consistent reference to terms defined in the LDC. The addition of Section 4.5.40.01 falls into the former of these two categories, while the majority of changes to Section 4.5.40.02 are related to definition references. However, within Section 4.5.40.02.b.1, it should be noted that language has been added to clarify that the 100-year Floodplain may be identified through sources other than federal FIRMs, including privately conducted floodplain studies. More discussion on this point is provided below above, under the heading for Section 4.5.20, and also below, under the heading for Sections 4.5.50 and 4.5.60.

Conclusions Regarding Section 4.5.40: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.40 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(e) ***Chapter 4.5 - Section 4.5.50, Procedures:*** Within Section 4.5.50, the proposed amendments are entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. Among these is the creation of a Floodplain Development Permit (Section 4.5.50.01), and reference to the procedural requirements associated with obtaining a Conditional Letter of Map Amendment (CLOMR) (Section 4.5.50.04).

A new aspect of the information required as part of a development application is the need to identify and map the extent of the 100-year Floodplain (and its various functional components) in areas of Corvallis for which the federal FIRMs do not provide this information. Section 4.5.50.03.p specifically lists the 100-year Floodplain components an applicant must identify in these situations. The Floodplain Administrator (see discussion below) shall be responsible for reviewing this information to determine if additional study is necessary. See also the explanation for under the heading for Section 4.5.20.

Conclusions Regarding Section 4.5.50: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.50 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(f) ***Chapter 4.5 - Floodplain Provisions - Section 4.5.60, Administration and Interpretation:*** An entirely new set of provisions that formally designate a local Floodplain Administrator and describe the associated federally mandated responsibilities is proposed as part of the amendments to Section 4.5.60. These provisions are all required by the federal NFIP floodplain regulations. As noted, the City Engineer, or designee, will fulfill this role. Among the responsibilities is the duty to review all Floodplain Development Permits for conformance with applicable standards; the power to obtain, utilize, and interpret floodplain studies not generated as part of the FIS or FIRM for Benton County; the obligation to perform periodic inspections of the 100-year Floodplain to identify development that has occurred inconsistent with applicable floodplain standards; and the requirement to permanently retain all information submitted with Floodplain Development Permit applications.

Conclusions Regarding Section 4.5.60: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.60 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards is consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(g) ***Chapter 4.5 - Section 4.5.70, Incentives for Relocating Buildings, Structures, Parking Lots, and Other Impervious Surfaces Outside of the 100-year Floodplain:*** Amendments in Section 4.5.70 are housekeeping in nature and are intended to ensure that consistent terminology is used throughout the Code and make clear that the term "structures" includes "buildings."

Conclusions Regarding Section 4.5.70: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.70 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(h) ***Chapter 4.5 - Section 4.5.80 - Standards in the 0.2-ft. Floodway:*** Within Section 4.5.80, the proposed amendments are almost entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. The exception is the addition of an allowed maintenance activity in the 0.2-ft. floodway, when such maintenance is consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines (Sections

4.5.80.03.a.8 and 4.5.80.03.b.7). While not mandated by the federal NFIP floodplain regulations, these maintenance activities are normal activities needed to maintain the floodplain function of the City's 0.2-ft. Floodways and the activities are not inconsistent with the federal NFIP floodplain regulations. They are also consistent with Comprehensive Plan Policies 4.8.7, 4.8.8, 4.10.3, 4.10.4, and 4.10.5. Therefore, they are being added to clarify that they are allowed.

Among the amendments occurring to address the federal NFIP floodplain regulations is the requirement that when fill is allowed through one of the specific exceptions outlined in Sections 2.11.40, 4.5.80.01, or 4.5.80.05, it must be designed to be stable under conditions of flooding (Section 4.5.80.04). Also among the amendments occurring to address the federal NFIP floodplain regulations is the provision that, notwithstanding the general requirement that development cannot cause a rise in Base Flood Elevation (BFE) within the 0.2-ft. Floodway, there can be an exception granted by the Floodplain Administrator under exceptional circumstances (Section 4.5.80.05). An example of an exceptional circumstance would be the installation of an intake structure for the Taylor Water Treatment Plant. That type of intake structure necessarily needs to be below the water surface of the Willamette River and could possibly cause a small rise in BFE. In such cases, a Conditional Letter of Map Revision (CLOMR) must be obtained by FEMA.

Conclusions Regarding Section 4.5.80: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.80 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(i) ***Chapter 4.5 - Section 4.5.90 - Standards in High Protection Floodway Fringe Areas:***

Within Section 4.5.90, the proposed amendments are almost entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. One exception is the addition of an allowed maintenance activity in the High Protection Floodway Fringe, when such maintenance is consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines (Sections 4.5.90.01.i and 4.5.90.04.g). While not mandated by the federal NFIP floodplain regulations, these maintenance activities are normal activities needed to maintain the floodplain function of the City's Special Flood Hazard Areas (SFHAs). Therefore, they are being added to clarify that they are allowed.

A second exception is the clarification that SFHAs mapped after December 31, 2004, shall be designated as High Protection Floodway Fringe. A third exception is the clarification that removal of vegetation and maintenance within areas allowed to be developed per the Code's Minimum Assured Development Area (MADA) Provisions are allowed (Section 4.5.90.01.j). These clarifications provide consistency of Chapter 4.5 - Floodplain Provisions with the City Council findings for the Natural Features Project.

Among the amendments occurring to address the federal NFIP floodplain regulations is the requirement that building, paving, and grading activities comply with the mandatory construction standards in the Partial Protection Floodplain areas (Sections 4.5.90.02 and 4.5.90.05.b). This revision clarifies what construction standards are to be used in the limited circumstances when building, paving, and grading activities are allowed, including when developing per MADA standards, and also ensures that such activities are consistent with the federal NFIP standards.

Also among the amendments occurring to address the federal NFIP floodplain regulations is the clarification that development cannot cause a rise in Base Flood Elevation (BFE) within the High Protection Floodway Fringe areas (Section 4.5.90.02). This provision is implied in the existing Code, is currently being implemented, and is consistent with the City Council findings for the Natural Features Project. There can be exceptions granted by the Floodplain Administrator under exceptional circumstances (Sections 4.5.50.04 and 4.5.80.05, etc.). Nevertheless, this clarification reiterates current Code requirements and provides more clear direction up front for customers and Staff.

Conclusions Regarding Section 4.5.90: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.90 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(j) ***Chapter 4.5 - Section 4.5.100 - Standards in Partial Protection Floodway Fringe Areas:***

Within Section 4.5.100, the proposed amendments are almost entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. One exception is the expansion of where the use of volumetric exchange is allowed, to include areas outside the Mill Race and Willamette and Marys River areas (Section 4.5.100.01). Volumetric exchange is a legitimate form of mitigation to address impacts to floodplains in Partial Protection Floodplain areas. The Partial Protection Floodplain areas include primarily the Mill Race and Willamette and Marys

River areas. However, there are also Partial Protection Floodplain areas in some already urbanized sections of streams, such as portions of Dixon Creek and urbanized sections of Dunawi Creek, etc. Additionally, areas developed per MADA standards will be required to use Partial Protection Floodplain construction standards. Properties along already urbanized sections of streams and in areas being developed per MADA provisions face challenges because of small lot situations and limited development areas. Therefore, it is recommended that the volumetric exchange tool be allowed in all Partial Protection Floodplain areas and areas being developed that are required to use the Partial Protection Floodplain mandatory construction standards in Section 4.5.100.

Among the amendments occurring to address the federal NFIP floodplain regulations and also make the requirements easier for customers to navigate, is a restructuring of the Partial Protection Floodplain standards to place things like the mandatory construction standards in their own sections (e.g. Section 4.5.110). Section 4.5.100 contains a cross-reference to require adherence to those mandatory construction standards (Section 4.5.100.03).

Also among the amendments occurring to address the federal NFIP floodplain regulations is the clarification that development cannot cause a rise in Base Flood Elevation (BFE) within the Partial Protection Floodway Fringe areas (Section 4.5.90.02). This provision is implied in the existing Code, is currently being implemented, and is consistent with the City Council findings for the Natural Features Project. Construction techniques are allowed to ensure compliance, such as volumetric exchange (Section 4.5.100.01). Additionally, exceptions can be granted by the Floodplain Administrator under exceptional circumstances (Sections 4.5.50.04 and 4.5.80.05, etc.). Nevertheless, this clarification reiterates current Code requirements and provides more clear direction up front for customers and Staff.

Conclusions Regarding Section 4.5.100: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.100 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(k) ***Chapter 4.5 - Section 4.5.110 - Construction Standards within the 100-year Floodplain:***

Within Section 4.5.110, the proposed amendments are almost entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. Among the amendments occurring to address the federal NFIP floodplain regulations is the clarification that development cannot cause a rise in Base Flood Elevation (BFE) (Section 4.5.110). This provision is implied in the existing Code, is currently being implemented, and is consistent with the City Council findings for the Natural Features Project. Construction techniques are allowed to ensure compliance, such as volumetric exchange (Section 4.5.100.01), flowthrough designs (Section 4.5.110), etc. Additionally, exceptions can be granted by the Floodplain Administrator under exceptional circumstances (Sections 4.5.50.04 and 4.5.80.05, etc.). Nevertheless, this clarification reiterates current Code requirements and provides more clear direction up front for customers.

Also among the amendments occurring to address federal NFIP floodplain regulations are the following:

- Set minimum standards for below grade crawlspaces (Section 4.5.110.05);

- Clarify that the lowest floor of residential development in AO Federal Flood Zones shall be one ft. above the flood Depth Number or, where no Depth Number is known, shall be three ft. above Highest Adjacent Grade (Section 4.5.110.07.a);

- Clarify “habitable” verses “nonhabitable” spaces to ensure that attached or detached garages and accessory structures are treated per the intended NFIP regulations (Sections 4.5.110.07.b and 4.5.110.08);

- Specify standards for Critical Facilities such that, to the maximum extent practicable, they are located outside SFHAs and, therefore, are accessible during flood events (Section 4.5.110.09). However, some facilities are critical to the community, but require location within SFHAs because of the nature of the facilities (e.g. the Taylor Water Treatment Plant that needs to pull water from the Willamette River);

- Specify standards for storage tanks in SFHAs to prevent flotation, collapse, or lateral movement during flood events (Section 4.5.110.10);

- Specify standards for on-site sewerage systems where such systems are allowed (Section 4.5.110.11);

- Specify standards and require a Floodplain Development Permit (FDP) for fences and walls that do not meet the exemption provisions in Section 2.11.40.b <u>and</u> either the velocity of flood waters

is at least five ft. per second where the fence or wall is proposed or the velocity of flood waters is unknown (Section 4.5.110.12). The standards for such fences and walls are outlined in Table 4.5 -1 - Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit.

The purpose of the Floodplain Development Permit requirement for fences and walls in SFHAs with unknown flood velocities or documented flood velocities at least five ft. per second is to ensure proper documentation and consideration of floodplain activities for the benefit of FEMA and the Floodplain Administrator or designee. However, in SFHAs with documented food velocities less than 5 ft. per second, applicants always have the option of constructing fences or walls that meet the exemption provisions of Section 2.11.40.b and then no such Floodplain Development Permit would be required. Staff was informed by the State FEMA representative that this approach to fences and walls would meet the minimum federal NFIP floodplain requirements, and yet allow at least some option for property owners to avoid having to obtain a FDP for all fences and walls. The State FEMA representative based this opinion on interaction with FEMA Region X staff;

- Specify standards and require a Floodplain Development Permit (FDP) for construction or placement of temporary structures, temporary storage associated with nonresidential uses, and temporary bridges in SFHAs (Section 4.5.110.13). This section outlines strict limits such that the intent is that the time of service of such temporary facilities or storage is limited to the minimum amount needed to accomplish the temporary activity (not to exceed 90 days). The Floodplain Administrator or designee may grant extensions for just cause.

- Specify standards for non-conversion of enclosed areas below the Lowest Floor in SFHAs (Section 4.5.110.14). These provisions are to ensure that areas below BFE continue to be used solely for parking of vehicles, limited storage, or access to a building and not be finished for use as human habitation without first becoming fully compliant with the applicable provisions in Chapter 4.5 - Floodplain Provisions and Chapter 2.11 - Floodplain Development Permit.

Conclusions Regarding Section 4.5.110: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.110 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(l) ***Chapter 4.5 - Section 4.5.120 - Subdivisions, Land Partitions, and Property Line Adjustments:***

Within Section 4.5.120, the proposed amendment is entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. The only amendment is to add a cross reference that requires adherence to Section 4.5.90.03, which is a more detailed set of requirements for these land use applications.

Conclusions Regarding Section 4.5.120: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.120 are a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(m) ***Chapter 4.5 - Original/Current Sections that Include Section 4.5.60 - Standards for Development in Steeply Sloped Areas, Section 4.5.70 - Standards for Development in Landslide Hazard Areas, and Section 4.5.80 - Hillside Development Standards:***

The contents of these sections were moved in their entirety to the new chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. In this new chapter, these sections kept their titles, but the section numbers changed to 4.14.50, 4.14.60, and 4.14.70, respectively. Moving these provisions to comprise their own chapter will increase ease of customer use of these provisions.

Conclusions Regarding Section 4.5.120: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Chapter 4.5 to move the landslide hazard and hillside development provisions to Chapter 4.14 satisfy a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(n) ***Chapter 4.5 - Section 4.5.130 - Map Refinements:*** Within Section 4.5.130, the proposed amendments are almost entirely related to mandatory aspects of the federal NFIP floodplain regulations with which the LDC must comply. One exception is the continued removal of text related to landslide hazards and hillside provisions because those sections are moving to Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Where such text is removed, cross-references to the new section numbers in Chapter 4.14 are inserted.

The Section 4.5.130 amendments involving floodplain subject matter are clarifications to make the current Code authority for floodplain Map Refinements abundantly clear. These clarifications specify that Map Refinements to 100-yr. Floodplain boundaries, etc. in areas studied by FEMA are limited to adjustments that are approved by FEMA. Map Refinements to 100-yr. Floodplain boundaries, etc. in areas that have not yet been studied by FEMA are limited to adjustments that are part of Floodplain studies developed in conformance with Sections 4.5.20.01.b and 4.5.50.03.p and approved by the Floodplain Administrator or designee.

Conclusions Regarding Section 4.5.130: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.130 satisfy a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

(o) ***Chapter 4.5 - Section 4.5.140 - Map Corrections:*** Within Section 4.5.140, the proposed amendments are entirely related to the continued removal of text related to landslide hazards and hillside provisions because those sections are moving to Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Where such text is removed, cross-references to the new section numbers in Chapter 4.14 are inserted.

Conclusions Regarding Section 4.5.140: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to Section 4.5.140 satisfy a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards are consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

2. Chapter 4.14 - Landslide Hazard and Hillside Development Provisions:

Chapter 4.14 - Global Change to Create a New Chapter for Text Related to Landslide Hazards and Hillside Development: Throughout this new chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, text related to landslide hazards and hillside development has been included. With the exception of references to floodplain development regulations and necessary alterations to numbering within the chapter, no substantive changes are proposed to the landslide hazard and hillside development regulations. Separating these provisions from the floodplain provisions that remain in Chapter 4.5 - Floodplain

Provisions will make those Code sections easier for customers to find and use. The remaining provisions in Chapter 4.5 pertain only to floodplain standards. Thus, Chapter 4.5 has been renamed from Chapter 4.5 - Natural Hazards and Hillsides Provisions to Chapter 4.5 - Floodplain Provisions. Additionally, since federal NFIP floodplain regulations require a floodplain management ordinance, having only floodplain provisions located in Chapter 4.5 and Chapter 2.11 - Floodplain Development Permit makes it easier to demonstrate to FEMA adherence to the federal NFIP floodplain standards.

Conclusions Regarding New Chapter 4.14: Section 1.2.80.01 of the LDC states that the LDC may be amended whenever the public necessity, convenience, and general welfare require such amendment. The proposed revisions to relocate the landslide hazard and hillside development provisions from Chapter 4.5 to a new Chapter 4.14 satisfy a public necessity to create a clear understanding of the regulatory framework within the LDC and demonstrate conformance with federal NFIP floodplain regulations. Therefore, the addition of these development standards is consistent with Comprehensive Plan Policy 1.2.1 as quoted above and Code Section 1.2.80.01.

PART II - STATEWIDE PLANNING GOAL ANALYSIS

The following list of goals is a summary of each applicable Statewide Planning Goal. Full text of each Goal may be viewed on the Oregon Department of Land Conservation and Development web site (www.lcd.state.or.us/goalsrul.html).

> **Goal 1 - Citizen Involvement** - **To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.** It requires each City and County to have a citizen involvement program with six components specified in the goal. It also requires local governments to have a Committee for Citizen Involvement (CCI) to monitor and encourage public participation in planning.
>
> **Goal 2 - Land Use Planning** - **To establish a land use planning process and Policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.** Outlines the basic procedures of Oregon's Statewide Planning Program. States that land use decisions are to be made in accordance with a Comprehensive Plan, and that suitable "implementation ordinances" putting the Plan's Policies into effect must be adopted. Requires that plans be based on "factual information"; that local plans and ordinances be coordinated with those of other jurisdictions and agencies; and that plans be reviewed periodically and amended as needed. Goal 2 also contains standards for taking exceptions to Statewide Planning Goals and Guidelines. An exception may be taken when a Statewide Planning Goal cannot or should not be applied to a particular area or situation.
>
> **Goal 6 - Air, Water, and Land Resources Quality** - **To maintain and improve the quality of the air, water, and land resources of the State.** Requires local Comprehensive Plans and implementing measures to be consistent with State and Federal regulations relative to air, water, and land resources.
>
> **Goal 7 - Areas Subject to Natural Disasters and Hazards** - **To protect life and property from natural disasters and hazards.** Addresses development in places subject to natural hazards such as floods or landslides. Requires that jurisdictions apply "appropriate safeguards" (flood plain zoning, for example) when planning for development in such areas.

Goal 1 - Citizen Involvement: The purpose behind Statewide Planning Goal 1 is **"to develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process."** Goal 1 even mentions the need for governments to have a Committee for Citizen Involvement (CCI) to monitor and encourage public participation in planning.

The City of Corvallis has a long history of active citizen involvement. The current Comprehensive Plan and Land Development Code were developed using extensive public processes. The purpose of this Legislative Amendment to the Land Development Code (LDT10-00001) is to implement federally mandated floodplain maps and regulations. Numerous articles about the anticipated changes to the floodplain maps and regulations were published over the past 1 ½ years in City publications such as *The City* and the Community Development Annual Report. Several presentations were also made to the Committee for Citizen Involvement to keep the members updated and solicit input. A public open house for all affected and potentially affected property owners was held in January, 2011. Additionally, training sessions for affected professionals such as surveyors, civil engineers, realtors, title companies, and insurance agents will be conducted in the next several months. Finally, all directly affected and potentially affected property owners were provided both legal and plain English public notices for the Planning Commission public hearing for this Amendment. The same property owners will be duly noticed for the City Council public hearing as well. Given the above, the proposed Legislative

Amendment to the Land Development Code (LDT10-00001) complies with Statewide Planning Goal 1, Citizen Involvement.

Goal 2 - Land Use Planning: The purpose behind Statewide Planning Goal 2 is **"to establish a land use planning process and policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions."** Goal 2 outlines the basic procedures of Oregon's Statewide Planning Program. It states that land use decisions are to be made in accordance with a Comprehensive Plan, and that suitable "implementation ordinances" that are to put the Plan's policies into effect must be adopted. It requires that plans be based on "factual information"; that local plans and ordinances be coordinated with those of other jurisdictions and agencies; and that plans be reviewed periodically and amended as needed. Goal 2 also contains standards for taking exceptions to Statewide Planning Goals and Guidelines. An exception may be taken when a Statewide Planning Goal cannot or should not be applied to a particular area or situation.

The primary issue associated with the proposed Legislative Amendment to the Land Development Code (LDT10-00001) is the requirement of Statewide Planning Goal 2 that *"suitable implementation ordinances"* must be adopted *"to put the Plan's policies into effect must be adopted."* Currently, the Land Development Code is not in conformance with the federal National Flood Insurance Program (NFIP) floodplain regulations. The reason the Code is not in conformance is that the Federal Emergency Management Agency (FEMA) completed its process to update the Benton County Flood Insurance Study (FIS) and associated Flood Insurance Rate Map (FIRM). The revised FIS and FIRM will be effective on June 2, 2011. As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011, or be immediately removed from the NFIP. Banks and insurance companies must also begin using the new FIRM maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through its Map Refinement process outlined in Section 4.5.90.

Because the revisions to the Flood Insurance Study (FIS) report for Benton County and the revised FIRM for the community have been completed, FEMA sent the City a Letter of Final Determination dated December 2, 2010, which stated certain additional requirements that must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within six months from the date of the FEMA letter. Prior to June 2, 2011, the City is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.). The NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature. In its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision.

In its letter of December 2, 2010, FEMA stated that some of the standards should already have been enacted by the City in order to establish eligibility in the NFIP, and additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have been previously adopted that meet or exceed the minimum requirements of 60.3(d);

The FEMA stated that if the City fails to enact the necessary floodplain management regulations by June 2, 2011, it will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) o the Flood Disaster Protection Act of 1973, as amended. Since the DLCD review of the City's floodplain management program revealed some areas of the City's Land Development Code that needed to be revised to fully meet the NFIP requirements, the City needs to pursue Option #1, above, and the City Council initiated this Land Development Code Text Amendment on January 3, 2011. Throughout the development of the proposed Legislative Amendment to the Land Development Code, Staff have worked closely with DLCD and FEMA staff to ensure that the proposed Amendment adequately implements the federal NFIP floodplain standards.

Given the above, Staff find there is an adequate factual base for making this land use decision. Additionally, local, state, and federal agencies were notified and their concerns were considered and addressed. The proposed implementation measures satisfy the FEMA direction. Consequently, the proposed Legislative Amendment to the Land Development Code complies with Statewide Planning Goal 2, Land Use Planning.

Goal 6 - Air, Water, and Land Resources Quality: The purpose behind Statewide Planning Goal 6 is **"to maintain and improve the quality of the air, water, and land resources of the State."** Goal 6 requires local Comprehensive Plans and implementing measures to be consistent with State and Federal regulations relative to air, water, and land resources. As

The City of Corvallis has enforced floodplain development standards for areas of the City inside of the 100-year Floodplain since prior to adoption of the 2006, Revised Land Development Code (LDC). Many of the regulations currently contained in Land Development Code Chapter 4.5 - Floodplain Provisions were taken directly from the federal regulations that a local jurisdiction must comply with in order to participate in the National Flood Insurance Program (NFIP). By adopting these regulations, property owners who must obtain flood insurance receive discounts on their policies. Presently, owners of property within the City of Corvallis qualify for a 10 percent reduction to the base cost of flood insurance policies due to the package of floodplain development regulations already in place. Despite its general consistency with federal requirements, an outside assessment of the LDC that was completed by the Oregon Department of Land Conservation (DLCD) has identified additional regulations that must be implemented in order for the City to remain eligible for participation in NFIP. This review was completed as part of the Federal Emergency Management Agency (FEMA)'s nationwide project to update the country's federal Flood Insurance Rate Maps (FIRMs).

In 2005, the Federal Emergency Management Agency (FEMA) began its nationwide project and on December 2, 2010, FEMA completed its process to update the Benton County Flood

Insurance Study (FIS) and associated Flood Insurance Rate Map (FIRM). The FIS and FIRM will be effective on June 2, 2011. As part of this map modernization process, FEMA digitized the current paper FIRM maps associated with the Benton County Flood Insurance Study. No new floodplain studies were done. The digitization of the FIRMs was based on local topographic maps and, as a result, some of the new floodplain boundaries are different than the boundaries shown on the current paper maps. The FEMA process for public review and comment on the FIRMs has already been completed and the new maps will be contained in the FEMA scientific engineering report entitled, *"The Flood Insurance Study for Benton County, Oregon and Incorporated Areas" dated June 2, 2011, with accompanying Flood Insurance Rate Map (FIRM)."*

As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011, or be immediately removed from the NFIP. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through its Map Refinement process outlined in Section 4.5.90.

As mentioned under the Goal 2 analysis, above, FEMA also requires the City to fully implement the federal NFIP floodplain regulations by June 2, 2011 or be immediately removed from the NFIP. The City must adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations (44 CFR 59, etc.). The NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature. In its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision.

The proposed Legislative Amendment to the Land Development Code (LDT10-00001) is intended to fully implement the federal NFIP floodplain regulations. By giving special consideration to floodplain areas, where water and land resources are anticipated to interact, adoption of these measures is consistent with Statewide Planning Goal 6. Given the above, the proposed Amendment complies with Goal 6, Air, Water, and Land Resources Quality.

Goal 7 - Areas Subject to Natural Disasters and Hazards: The purpose behind Statewide Planning Goal 7 is **"to protect life and property from natural disasters and hazards."** For Corvallis, this is directed, in part, at areas subject to periodic flooding. With regard to this goal, the City is required to:

> **Address development in places subject to natural hazards such as floods or landslides. Requires that jurisdictions apply "appropriate safeguards" (flood plain zoning, for example) when planning for development there.**

Chapter 4.5 - Natural Hazards and Hillside Development Provisions and Chapter 1.6 -Definitions from the Land Development Code have long provided Corvallis' response to the Federal Emergency Management Administration mandates regarding areas in the community within the floodways and 100-year floodplains of the streams and rivers in Corvallis. These provisions have met the requirements of Goal 7 to date. However, as mentioned under the analyses for

Goals 2 and 6, both DLCD and FEMA have identified some shortcomings in the City's floodplain provisions. These shortcomings make the City's current floodplain Code requirements inconsistent with the federal NFIP floodplain regulations.

The most recent draft of the Oregon Model Floodplain Development Ordinance was developed by DLCD in coordination with FEMA and the state Building Codes Division, so that state-specific land use and building code provisions are integrated with federal NFIP floodplain regulations. This most recent draft is currently under review by FEMA. The DLCD has also been working with FEMA to ensure that existing development codes of jurisdictions affected by the map modernization process are consistent with current federal 100-year Floodplain regulations. As a result, DLCD has performed detailed reviews of existing floodplain development standards from each jurisdiction in Oregon, including the City of Corvallis, and identified areas of inconsistency. The most important of these is the creation of an independent Floodplain Development Permit program that will track development in the 100-year floodplain. While the City of Corvallis has been indirectly tracking development within the 100-year floodplain for many years, the information has not been kept separate from other building permits or permanently retained, as required by the federal regulations. City Staff have used the most recent draft of the Oregon Model Floodplain Development Ordinance as the basis for addressing the identified areas of inconsistency, including the creation of a Floodplain Development Permit, with the goal of achieving consistency with state and federal NFIP floodplain regulations, thereby achieving the optimal level of regulation that improves the community's flood insurance policy discounts.

Working from the existing Land Development Code regulatory framework, the bulk of the required amendments to the LDC occur within LDC Chapter 4.5 - Natural Hazard and Hillside Development Provisions, which will be renamed to Chapter 4.5 - Floodplain Provisions. Changes to Chapter 1.4 - Nonconforming Development, Chapter 1.6 - Definitions, and Chapter 2.5 - Planned Development were also necessary to comply with the federal regulations and maintain consistency across these coordinated chapters. In addition, a new chapter, Chapter 2.11 - Floodplain Development Permit, was created to satisfy the federal requirement of a Floodplain Development Permit for many of the development activities that occur within the 100-year Floodplain. In general, Chapter 4.5 - Floodplain Provisions will continue to contain the standards applicable to development within the 100-year floodplain, while Chapter 2.11 - Floodplain Development Permit will describe the process for obtaining the necessary permits. To facilitate a review of the draft amendments, citations from the relevant federal regulations (44 CFR) and sections of DLCD's most recent draft of the Most recent draft of the Oregon Model Floodplain Development Ordinance have been provided in each Chapter at the end of new or modified text. Lastly, it should be noted that standards pertaining to landslide hazards and hillside development have been relocated to a new chapter, Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist both internal and external customers find the appropriate Code sections more easily.

The proposed Legislative Amendment to the Land Development Code (LDT10-00001) is intended to fully implement the federal NFIP floodplain regulations. Given the above, the proposed Amendment complies with Goal 7, Areas Subject to Natural Disasters and Hazards.

RECOMMENDATION ON LEGISLATIVE AMENDMENT TO THE LAND DEVELOPMENT CODE

Based upon the criteria and conclusions discussed above, it is recommended that the Planning Commission do the following:

I. Recommend that the City Council approve the proposed Legislative Amendment to the Land Development Code (LDT10-00001), with the language as proposed in Attachment A, and based upon the findings listed below:

If the Planning Commission concurs, the following motion is suggested:

Motion
I move to recommend to the City Council approval of the Legislative Land Development Code Text Amendment (LDT10-00001), as presented in Attachment "A" of the January 21, 2011, Planning Commission staff report. This motion is based on Planning Commission findings in support of the Text Amendment, as well as the findings and conclusions contained in the January 21, 2011, staff report.

FINDINGS

1. **Land Development Code's Implementation of the Federal NFIP Floodplain Regulations:** Comprehensive Plan policy 1.2.1 states, "*The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.* In addition, Code Section 1.2.80.01 states that the *"Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies."* Currently, the Land Development Code is not in conformance with the federal National Flood Insurance Program (NFIP) floodplain regulations. The proposed Legislative Amendment to the Land Development Code includes changes to bring the Land Development Code into conformance with the federal NFIP floodplain regulations. Given that the Land Development Code is out of conformance with the current federal NFIP floodplain regulations, public necessity, convenience, and general welfare require that it be amended to make it consistent with them (Comprehensive Plan Policy 1.2.1; LDC 1.2.80.01).

2. **Map Changes:** As outlined in its letter of December 2, 2010, FEMA requires the City to implement the new FIRM maps by June 2, 2011, or be immediately removed from the National Flood Insurance Program (NFIP). Banks and insurance companies must also begin using the new FIRM maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies. The Land Development Code recognizes that there will be periodic updates to the FEMA FIRM maps and addresses implementation of these updates through its Map Refinement process outlined in Section 4.5.90. In some cases, the FEMA map modernization resulted in changes to flood zone boundaries. In such cases, the FEMA map updates will affect the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and will also affect the High Protection and Partial Protection Floodplain boundaries on the Natural Hazards Map (a component of the Zoning Map). Since these map revisions are mandated by FEMA,

they are currently allowed through the Map Refinement procedures in Section 4.5.90 and do not require any formal land use process. Therefore, City staff are working with DLCD/FEMA staff, to implement the mapping changes by June 2, 2011.

3. **Global Changes:** To fully implement the federal NFIP floodplain regulations, Code revisions need to occur throughout Articles I through IV of the LDC *globally* (i.e., to all parts of the LDC) to ensure consistent terminology and requirements. Chapter 1.1 - The City Council and Its Agencies and Officers, Chapter 1.2 - Legal Framework, and Chapter 1.3 - Enforcement all contain examples of "global changes" in that they now contain references to Floodplain Development Permits, the Floodplain Administrator or designee, etc. Another examples of such a "global change" includes the relocation of the landslide hazards and hillside development standards from Chapter 4.5 to a new chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. This relocation of the landslide hazard and hillside development regulations will assist both internal and external customers find the appropriate Code sections more easily. However, this change also resulted in the need to change the name of the chapter and all the related Code section numbers in all the areas of the Code that addressed landslide hazards and hillside development.

The renaming of Chapter 4.5 - Floodplain Provisions from Chapter 4.5 - Natural Hazards and Hillside Development to Chapter 4.5 - Floodplain Provisions required a "global change" to correct the chapter name and section number references throughout the Code. New definitions in Chapter 1.6 - Definitions created a need to correct terminology throughout the Code. The creation of a new Chapter 2.11 - Floodplain Development Permit brought out the need to reference this chapter and its requirements, where appropriate, throughout the Code. These examples are just a few of the "global" types of changes that needed to occur as the result of this Legislative Amendment to the LDC.

Given the above, incorporation of the proposed "global changes" is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

4. **Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions:** Proposed amendments to Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions are due to federally required changes to existing definitions, as well as the addition of newly defined terms to Chapter 1.6. Within Chapter 1.4 - Nonconforming Development, the provisions related to the alteration or repair of a nonconforming structure have been changed to reflect modifications to the definitions of Substantial Improvement and Substantial Damage. The regulatory language addressing these situations has also been changed to directly refer to standards in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, rather than describing the scope of improvements required when structures are located in the 100-year Floodplain.

In some cases, the federal NFIP regulations require definitions that are different from those of terms already contained in Chapter 1.6. For example, the term *"Development"* is defined by the federal NFIP regulations using language that is notably different from how it is currently defined in Chapter 1.6. Achieving consistency with the federal NFIP regulations requires the adoption of the definitions they contain. This resulted in the need to clarify how and when a term with two different definitions applied to various portions of

the LDC. A new Section 1.6.40 in Chapter 1.6 - Definitions contains terms and their definitions that only apply to development within the 100-year Floodplain. However, there are terms outside of Section 1.6.40 that apply to development within the 100-year Floodplain, but also apply to development elsewhere within the community. In these instances, modifications to the existing definitions were made, where necessary, but the term was retained in the main list of definitions in Section 1.6.30.

Given the above, incorporation of the proposed changes to Chapter 1.4 - Nonconforming Development and Chapter 1.6 - Definitions is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

5. **Chapters 2.0 through 2.19:** Article II contains the provisions for each land use application type; from Annexations to Property Line Adjustments. Besides making the global changes necessary to reflect consistency with the primary chapters affected by the 100-year Floodplain amendments, Article II is proposed for expansion through the addition of Chapter 2.11 - Floodplain Development Permit. This new chapter contains the procedural requirements for the issuance of Floodplain Development Permits, which are required by the federal NFIP floodplain standards for most types of development. The new chapter also contains the procedural requirements for Floodplain Development Permit Variances. The existing LDC provisions allow for floodplain development standards to be varied through the Planned Development process. The addition of a Floodplain Development Permit Variance process does not supplant the opportunity for seeking deviations through the Planned Development process, but rather defines a limited scope of Floodplain Development Permit Variances that must be processed using the provisions in Chapter 2.11 - Floodplain Development Permit. Any Floodplain Development Permit Variance request that exceeds this limited scope would continue to be handled through the Planned Development process. Amendments to LDC Chapter 2.5 - Planned Development have been made consistent with this approach.

   Given the above, incorporation of the proposed changes to Chapters 2.0 through 2.19 is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

6. **Chapters 3.0 through 3.38:** The only changes made to Chapters 3.0 through 3.38 are global in nature, and are required to maintain consistency with terms or section references from the primary Code chapters affected by the proposed 100-year Floodplain amendments. Therefore, incorporation of the proposed changes to Chapters 2.0 through 2.19 is consistent with Comprehensive Plan Policy 1.2.1 and Land Development Code Section 1.2.80.01.

7. **Chapters 4.0 through 4.14:** Chapters 4.0 through 4.14 contain all of the development standards not otherwise captured by chapters 3.0 through 3.38. These provisions cover such things as public improvements, parking, landscaping, lighting, solar access, signs, parking, pedestrian oriented design standards, natural resources and natural hazards, and Minimum Assured Development Area (MADA). While global changes to some of these chapters were necessary to reflect consistency with the primary chapters affected by the proposed 100-year Floodplain amendments, the most significant modifications are contained in Chapter 4.5 - Natural Hazards and Hillside Development Provisions. The

chapter was renamed to Chapter 4.5 - Floodplain Provisions and all of the chapter's provisions pertaining to landslide hazards and hillsides were removed and relocated in the newly created Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Amendments to Chapter 4.11 - Minimum Assured Development Area are also proposed to reflect new provisions in Chapter 4.5 - Floodplain Provisions that clarify how MADA applies to areas of High Protection Floodway Fringe.

Extensive amendments are proposed to Chapter 4.5 - Floodplain Provisions. These effect every major section of the Chapter, including those that contain its purposes, applicability, procedures, construction standards, and provisions for map refinements and map corrections. New sections have also been added to address the federal NFIP requirement of designating a Floodplain Administrator, and to stipulate development standards for Critical Facilities, fences and walls, storage tanks, on-site sewage systems (e.g., septic systems), and temporary structures and storage. New provisions are also proposed that would regulate the conversion of potentially habitable spaces located at an elevation below the Base Flood Elevation.

The proposed Legislative Amendment to the Land Development Code includes changes to bring the Land Development Code into conformance with the federal NFIP floodplain regulations. Given that the Land Development Code is out of conformance with the current federal NFIP floodplain regulations, public necessity, convenience, and general welfare require that it be amended to make it consistent with them (Comprehensive Plan Policy 1.2.1; LDC 1.2.80.01).

8. **Compliance with Statewide Planning Goals:** Given the analysis presented in Part II of this staff report, the proposed Legislative Amendment to the Land Development Code complies with the applicable Statewide Planning Goals, identified as Goals 1, 2, 6, and 7.

TABLE OF CONTENTS FOR LAND DEVELOPMENT CODE CHAPTERS THAT ARE BEING REVISED AS PART OF LDT10-00001.

HOWEVER, THE BULK OF THESE CHANGES ARE "HOUSEKEEPING" CHANGES TO REFLECT CHANGED CODE SECTION NUMBERS AND CODE CHAPTER NAME CHANGES. THE MAIN SUBSTANTIVE CHAPTERS WITH CHANGES INCLUDE:

- **CHAPTER 1.4 - NONCONFORMING DEVELOPMENT**
- **CHAPTER 1.6 - DEFINITIONS**
- **CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT** (NEW CHAPTER)
- **CHAPTER 4.5 - FLOODPLAIN PROVISIONS** (RENAMED CHAPTER & REVISED TO FULLY ADDRESS FEMA REGULATIONS AND ALSO MOVE THE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS TO A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)
- **CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS** (NEW CHAPTER THAT CONTAINS THE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS THAT WERE MOVED FROM THE OLD CHAPTER 4.5 - FLOODPLAIN PROVISIONS)

THE FULL LIST OF CHAPTERS (BOTH CHAPTERS WITH "HOUSEKEEPING" CHANGES AND THOSE WITH SUBSTANTIVE CHANGES) INCLUDES:

Chapter

ARTICLE I - GENERAL PROVISIONS

1.1	The City Council and its Agencies and Officers
1.2	Legal Framework
1.3	Enforcement
1.4	Nonconforming Development
1.6	Definitions

ARTICLE II - ADMINISTRATIVE PROCEDURES

2.0	Public Hearings
2.1	Comprehensive Plan Amendment Procedures
2.2	Zone Changes
2.3	Conditional Development
2.4	Subdivisions and Major Replats
2.5	Planned Development

2.6	Annexations
2.7	Extension of Services Outside the City Limits
2.10	Major Neighborhood Center Master Site Plan Requirements
2.11	~~Reserved~~ Floodplain Development Permit
2.12	Lot Development Option
2.13	Plan Compatibility Review
2.14	Partitions, Minor Replats, and Property Line Adjustments
2.19	Appeals

ARTICLE III - DEVELOPMENT ZONES

RESIDENTIAL ZONES

3.1	RS-3.5	Low Density Zone
3.2	RS-5	Low Density Zone
3.3	RS-6	Low Density Zone
3.4	RS-9	Medium Density Zone
3.5	RS-9(U)	Medium Density-University Zone
3.6	RS-12	Medium-high Density Zone
3.7	RS-12(U)	Medium-high Density-University Zone
3.8	RS-20	High Density Zone
3.9	(MUR)	Mixed Use Residential Zone
3.10	RS-1	Extra-low Density Residential Zone

COMMERCIAL AND OFFICE ZONES

3.11	(P-AO)	Professional and Administrative Office Zone
3.14	(NC)	Neighborhood Center Zone
3.15	(RF)	Riverfront Zone
3.16	(CB)	Central Business Zone
3.17	(CBF)	Central Business Fringe Zone
3.19	(MUCS)	Mixed Use Community Shopping Zone
3.20	(MUGC)	Mixed Use General Commercial Zone

INDUSTRIAL ZONES

3.21	(MUT)	Mixed Use Transitional Zone
3.22	(LI-O)	Limited Industrial - Office Zone
3.23	(LI)	Limited Industrial Zone
3.24	(GI)	General Industrial Zone
3.25	(II)	Intensive Industrial Zone
3.26	(RTC)	Research Technology Center Zone
3.27	(MUE)	Mixed Use Employment Zone

OVERLAYS

3.30	(WRG)	Willamette River Greenway Overlay

OTHER ZONES

3.36	(OSU)	Oregon State University Zone
3.37	(AG-OS)	Agriculture - Open Space Zone
3.38	(C-OS)	Conservation - Open Space Zone

ARTICLE IV - DEVELOPMENT STANDARDS

Chapter

4.0	Improvements Required with Development
4.1	Parking, Loading, and Access Requirements
4.2	Landscaping, Buffering, Screening, and Lighting
4.4	Land Division Standards
4.5	~~Natural Hazard and Hillside Development~~ Floodplain Provisions
4.6	Solar Access
4.7	Sign Regulations
4.8	Manufactured Dwelling Facility Standards
4.9	Additional Provisions
4.10	Pedestrian Oriented Design Standards
4.11	Minimum Assured Development Area (MADA)
4.13	Riparian Corridor and Wetland Provisions
4.14	Landslide Hazard and Hillside Development Provisions

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ORDINANCE 2011 – 01

AN ORDINANCE RELATING TO LAND USE, AMENDING THE CORVALLIS LAND DEVELOPMENT CODE TEXT TO ADDRESS NEW FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOODPLAIN MAPS AND REGULATIONS, ESTABLISHING FINDINGS, AMENDING ORDINANCE 93-20, AND DECLARING AN EMERGENCY (LDT10-00001)

WHEREAS, on January 3, 1985, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issued a Flood Insurance Rate Map (FIRM) that identified the Special Flood Hazard Areas (SFHAs) in the City of Corvallis as the areas subject to inundation by the base flood (flood that has a one percent chance of being equaled or exceeded in any given year);

WHEREAS, recently, FEMA completed a re-evaluation of flood hazards in the community and, on July 21, 2009, FEMA provided the City with preliminary copies of the Flood Insurance Study (FIS) report and FIRM that identify existing flood hazards in the community;

WHEREAS, FEMA did not receive any comments on the preliminary copies of the FIS report and FIRM and, accordingly, the FIS report and FIRM for the community will become effective on June 2, 2011;

WHEREAS, because the FIS report and FIRM for the community has been completed, FEMA sent the City a Letter of Final Determination dated December 2, 2010, which stated certain additional requirements that must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within six months from the date of the FEMA letter;

WHEREAS, prior to June 2, 2011, the City is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragragh 60.3(d) of the NFIP regulations (44 CFR 59, etc.);

WHEREAS, the NFIP standards are minimum requirements and do not supercede any state or local requirements of a more stringent nature:

WHEREAS, in its letter of December 2, 2010, FEMA emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document that includes adoption of the current effective FIS report and FIRM to which the regulations apply, and the other modifications made by this FIRM map revision;

WHEREAS, in its letter of December 2, 2010, FEMA stated that some of the standards should already have been enacted by the City in order to establish eligibility in the NFIP, and additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have been previously adopted that meet or exceed the minimum requirements of 60.3(d);

WHEREAS, if the City fails to enact the necessary floodplain management regulations by June 2, 2011, it will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) o the Flood Disaster Protection Act of 1973, as amended;

WHEREAS, in addition to the community using the FIS report and FIRM to manage development in the floodplain, FEMA will use the FIS report to establish appropriate flood insurance rates and, on the effective date of the revised FIRM (June 2, 2011), actuarial rates for flood insurance will be charged for all new structures and substantial improvements to existing structures located in the identified SFHAs;

WHEREAS, these rates may be higher if structures are not built in compliance with the floodplain management standards of the NFIP;

WHEREAS, the actuarial flood insurance rates increase as the lowest elevations (including basements) of new structures decrease in relation to the Base Flood Elevations established for the community, and this is an important consideration for new construction because building at a higher elevation can greatly reduce the cost of flood insurance;

WHEREAS, the FIS report and FIRM for the community have been prepared in FEMA's countywide format, which means that flood hazard information for all jurisdictions within Benton County, Oregon, has been combined into one FIS report and FIRM;

WHEREAS, when the FIS report and FIRM are printed and distributed by FEMA, the City will receive only those panels that present flood information for the City, and FEMA will provide complete sets of the FIRM panels to Benton County officials, where they will be available for review by the City;

WHEREAS, the new FIRM panels have been computer-generated and, once the FIS report and FIRM are printed and distributed, the digital files containing flood hazard data for the entire county can be provided to the City for use in a computer mapping system. These files can be used in conjunction with other thematic data for floodplain management purposes, insurance purchase and rating requirements, and many other planning applications;

WHEREAS, the City may be eligible for additional credits under FEMA's Community Rating System if the City implements its activities using digital mapping files;

WHEREAS, the Oregon Department of Land Conservation and Development (DLCD) coordinated with FEMA to ensure that existing land development codes of jurisdictions affected by the FEMA map modernization process are consistent with current federal and state 100-year floodplain regulations.

WHEREAS, the DLCD review of the City's floodplain regulations concluded that the City's land use regulations were not in full compliance with all the standards of Paragraph 60.3(d) of the NFIP regulations, and directed the City to update its land use regulations to be in full compliance;

WHEREAS, on March 15, 2010, the City Council approved the Planning Division Work Plan that recognized the need for a legislative Amendment to the Land Development Code to address the revised FIS report and FIRM maps, as well as the all the standards of Paragraph 60.3(d) of the NFIP regulations;

WHEREAS, on January 3, 2011, the City Council initiated legislative Amendment to the Land Development Code LDT10-00001 to address the revised FIS report and FIRM maps, as well as the all the standards of Paragraph 60.3(d) of the NFIP regulations;

WHEREAS, both the Comprehensive Plan Map and the Land Development Code Official Zoning Map include a Natural Hazards Overlay; and a Natural Hazards Map has been adopted as part of the Corvallis Land Development Code Official Zoning Map;

WHEREAS, the City's Land Development Code requires use of the most current FEMA Flood Insurance Rate Maps (FIRMs) as part of the City's floodplain management program;

WHEREAS, Land Development Code Section 4.5.90 contains provisions for Map Refinements that allow refinements to the actual boundaries of some Natural Hazards, including 100-year Floodplain boundaries in accordance with FEMA regulations, and Map Refinements are accomplished Ministerially on the relevant maps, with no land use process;

WHEREAS, once the revised FIRM mapping information has been reflected on the City's Comprehensive Plan Map and Land Development Code Official Zoning Map, inclusive of the Natural Hazards Map, through the Ministerial Land Development Code Map Refinement procedures, then the Land Development Code text constitutes the only remaining City regulations that need to be modified to fully comply with all the standards of Paragraph 60.3(d) of the NFIP regulations;

WHEREAS, the Planning Commission conducted, after proper legal notice, a public hearing on February 2, 2011, and deliberations on _____, 2011, to consider the Legislative Amendment (LDT10-00001) to the Corvallis Land Development Code Text and interested persons and the general public were given an opportunity to be heard. The Planning Commission has reviewed all matters presented and has provided its recommendation to the City Council;

WHEREAS, the City Council conducted, after proper legal notice, a public hearing on April 4, 2011, and deliberations on _____, 2011, concerning the

proposed changes to the Corvallis Land Development Code Text, and interested persons and the general public were given an opportunity to be heard;

WHEREAS, the complete staff report to the City Council, dated _____, 2011, including exhibits; and those portions of the minutes of the April 4, 2011, public hearing and the _____, 2011, deliberations, containing the staff presentations and deliberations by the Council that demonstrate support for the proposed Legislative Amendment to the Land Development Code Text (portion of LDT10-00001) are by reference incorporated herein and are hereby adopted by the City Council;

NOW THEREFORE, THE CITY OF CORVALLIS ORDAINS AS FOLLOWS:

Section 1. Exhibit A, a detailed set of findings regarding the Legislative Amendment to the Land Development Code Text (LDT10-00001) is incorporated in and made part of this Ordinance.

Section 2. The existing Land Development Code is hereby amended as shown in Exhibit B of this Ordinance, as summarized in "i," below, and subject to the further revisions outlined in Section 3, below. Exhibit B is incorporated in and made part of this Ordinance.

i. Summary of Amendments

1. Revising Chapter 4.5 & New Chapter 4.14 -

   i) Renaming Chapter 4.5 to *"Chapter 4.5 - Floodplain Provisions;"*
   ii) Updating it to fully address the federal floodplain standards;
   iii) Removing the hillside development and landslide hazard provisions & placing them in a new Code chapter entitled *"Chapter 4.14 - Landslide Hazard and Hillside Development Provisions;"*
   iv) Properties containing streams and located in areas where no FEMA studies have been done, but where 100-year Floodplain potentially exists, may be required to perform floodplain studies during the development process. If 100-year Floodplain areas are discovered on these properties, then the new floodplain regulations will apply;

2. Revising Chapter 1.6 - Definitions - Updating to add new definitions and modify existing ones to fully comply with the applicable federal floodplain regulations;

3. Revising Chapter 2.5 - Planned Development - Updating to address floodplain regulation variations exceeding the scope of the federally mandated Floodplain Development Permit Variance process;

4. Creating a New Chapter 2.11 - Floodplain Development Permit -

   i) Required to address the federally mandated Floodplain Development Permit process. The National Flood Insurance Program (NFIP) regulations require a Floodplain Development Permit for all proposed construction and other development in 100-yr. floodplain areas of the community;
   ii) The Floodplain Development Permit process will be proposed as a staff-level process, similar to Building Permits;
   iii) Including the federally mandated Floodplain Development Permit Variance process, which is limited in scope, but involves discretion. This process would be a public hearing process, with review by the Land Development Hearings Board;

5. Housekeeping Changes to Remainder of the Code to Address Changes in 1-4, Above - "Housekeeping" changes will need to occur throughout the Code to accommodate the changes in 1-4, above.

Section 3. Revise text per City Council direction as outlined in Exhibit C of this Ordinance. Exhibit C is incorporated in and made part of this Ordinance.

Section 4. Ordinance 93-20 as amended is hereby amended.

Section 5. Emergency Clause. The earliest imposition of the provisions of this ordinance is necessary to preserve the peace, health, and safety of the public. Accordingly, an emergency is declared, and this ordinance will take effect immediately upon its passage by the Council and approval by the Mayor.

PASSED by the Corvallis City Council this ____ day of May, 2011.

APPROVED by the Mayor this ____ day of May, 2011.

EFFECTIVE DATE: _____, 2007

_____
Mayor

ATTEST:

_____
City Recorder

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EXHIBIT A

DETAILED FINDINGS FOR LDT10-00001

(TO BE DEVELOPED FOLLOWING BOTH PLANNING COMMISSION AND CITY COUNCIL PUBLIC HEARING PROCESSES FOR LDT10-00001. THE FINDINGS WILL REFLECT THE CITY COUNCIL RATIONALE FOR ITS DECISION REGARDING LDT10-00001)

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EXHIBIT B

LAND DEVELOPMENT CODE TEXT CHANGES FOR LDT10-00001

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SEE EXHIBIT I TO MARCH 21, CITY COUNCIL STAFF REPORT FOR ALL CHAPTERS EXCEPT CHAPTER 1.6 - DEFINITIONS, CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT, AND CHAPTER 4.5 - FLOODPLAIN PROVISIONS.

THE THREE AFOREMENTIONED CHAPTERS ARE PRESENTED HERE IN THE VERSION THAT WAS PRESENTED TO THE PLANNING COMMISSION IN THIS JANUARY 21, 2011, STAFF REPORT.

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CHAPTER 1.6
DEFINITIONS

Section 1.6.10 - GENERAL MEANING OF WORDS

All words and terms assume their dictionary definitions unless they are specifically defined in this Code or the context in which they are used clearly indicates to the contrary.

Section 1.6.20 - COMMON WORDS

a. All words in present tense include the future tense.

b. All words in plural include the singular, and all words in singular include the plural unless the context clearly indicates to the contrary.

c. The word "shall" is mandatory and the word "may" is permissive.

d. The word "building" includes the word "structure."

e. The phrase "used for" includes the phrases "arranged for," "designed for," "intended for," "maintained for," and "occupied for."

f. The words "land" and "property" are used interchangeably unless the context clearly indicates to the contrary.

g. The words “lot” and “parcel” are used interchangeably unless the context clearly indicates to the contrary.

Section 1.6.30 - SPECIFIC WORDS AND TERMS

Abutting Properties - Two or more properties joined by a common boundary line or point, as shown in Figure 1.6-1 - Abutting and Adjacent Lots.

Access - Place, means, or way by which ingress and egress are provided. See also definition for Solar Access.

Accessory Dwelling - See Chapter 4.9 - Additional Provisions.

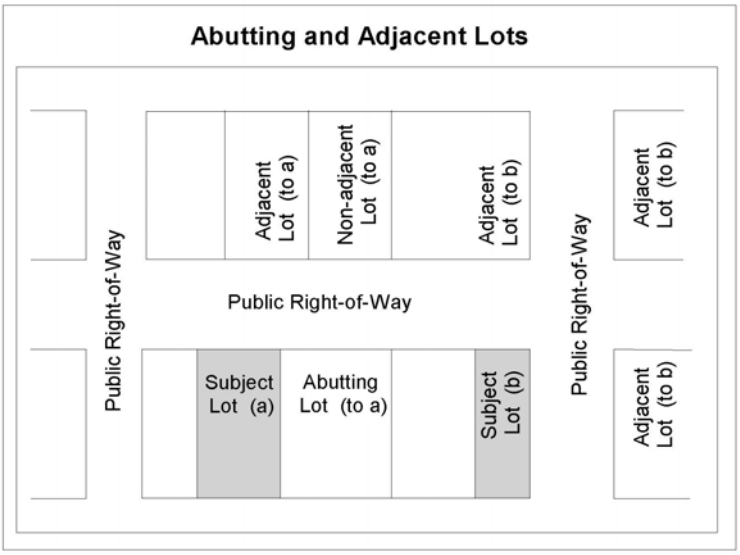


Figure 1.6-1 - Abutting and Adjacent Lots

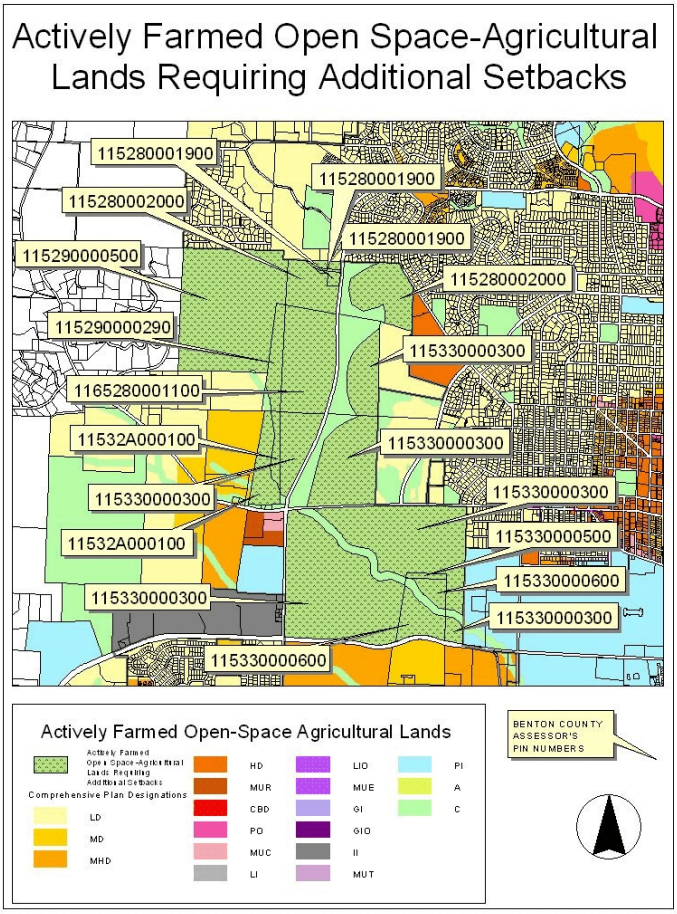
Accessory Structure - Structure customarily incidental and subordinate to the main use of a property and located on the same lot as the main use; freestanding and structurally separated from the main use.

Accessory Use - Use customarily incidental and subordinate to the main use of a property and located on the same lot or site as the main use.

Accessway - Narrow strip of land connecting a parcel to a public street right-of-way or a private street located within its own separate tract. The accessway ensures access to the parcel. Actual pavement widths within an accessway are in accordance with the City's Off-street Parking and Access Standards established by and available through the City Engineer and amended over time.

Acre - Unit of land equal to 43,560 sq. ft.

Actively Farmed Open Space-Agricultural Lands - Properties that are designated as Open Space-Agricultural on the Comprehensive Plan Map and are used for Agricultural Uses as defined in Section 3.0.30.05. For the purposes of requiring additional OS-AG setbacks, the setback requirements are limited to sites next to lands designated as OS-AG on the Comprehensive Plan Map and listed in the Benton County Assessor's Office as the Oregon State University Lands identified (on December 31,2006) as Parcel Identification Numbers: 115290000500;115280002000; 115290000290; 115280001100; 115280001900; 115280001100; 115330000300; 11532A000100; 115330000500; or 115330000600 as shown.



Actual Construction - Permanent placing and fastening of construction materials.

Adjacent - Adjacent properties are either abutting or, in the absence of right-of-way, would be considered abutting. Uses are considered adjacent if they exist on adjacent properties, as shown in Figure 1.6-1 - Abutting and Adjacent Lots.

Administrative Zone Change - Amendment to the boundaries of zones shown on the Official Zoning Map. A detailed definition for an Administrative Zone Change is contained in Section 2.2.50.b. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Section 2.2.50 - Quasi-Judicial Change Procedures for Administrative Changes.

Affordable Housing - Housing for which ownership costs (mortgage loan principal, interest, property taxes, and insurance) or rental costs (unit rent and utilities) require no more than 30 percent of the gross monthly income of a household that has income at or below 80 percent of the Corvallis area median. The Corvallis area median is calculated annually by the U.S. Department of Housing and Urban Development (HUD) and applied based on household size. These numbers are updated annually by HUD and are on file in the City's Housing Division.

Agriculture - Nursery, horticulture, and similar activities for the cultivation of commercial crops; pasturing, breeding, dairying, and similar uses of animals; and poultry farming for commercial use. Specific Agricultural Use Types are defined in Section 3.0.30.05 - Agricultural Use Types.

Alley - Public or private right-of-way designed and intended to serve as secondary access to the side or rear of those properties having a street as primary access.

Alteration - Change, addition, or modification in construction or occupancy of a building or structure.

Annexation - Land use process that evaluates whether a property meets the criteria for incorporation into the City limits and meets the requirements to be forwarded to the voters for a final decision on its incorporation. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.6 - Annexations. The State of Oregon can mandate, without voter approval, the annexation of property on which a health hazard exists. See Health Hazard Annexation.

Apartment - Dwelling unit located within a Multi-dwelling, but excluding condominiums. See Multi-dwelling under Building Types.

Application - Materials submitted or to be submitted.

Area, Gross - Total area of a parcel or site, usually expressed in acres.

Area, Net - Total area of a parcel or site, usually expressed in acres and excluding existing public street rights-of-way and, if a developer desires, excluding public parks, Significant Natural Feature areas dedicated to the public, and/or other areas permanently precluded from development due to development constraints or conservation easements. Planned streets shall not be excluded from the net area.

Area of Shallow Flooding - See "Area of Shallow Flooding" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Area of Special Flood Hazard - See "Special Flood Hazard Area" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Average Setback (weighted by length of wall) - Formula for determining Average Setback is as follows: $AS = (y_1 \times SD_1) + (y_2 \times SD_2) + (y_n \times SB_n)$, as shown below in Figure 1.6-2 - Average Setback, where:

AS	=	Average Setback
y	=	Percent of wall length at a particular distance from property line
SD	=	Setback Distance (actual distance from the property line)

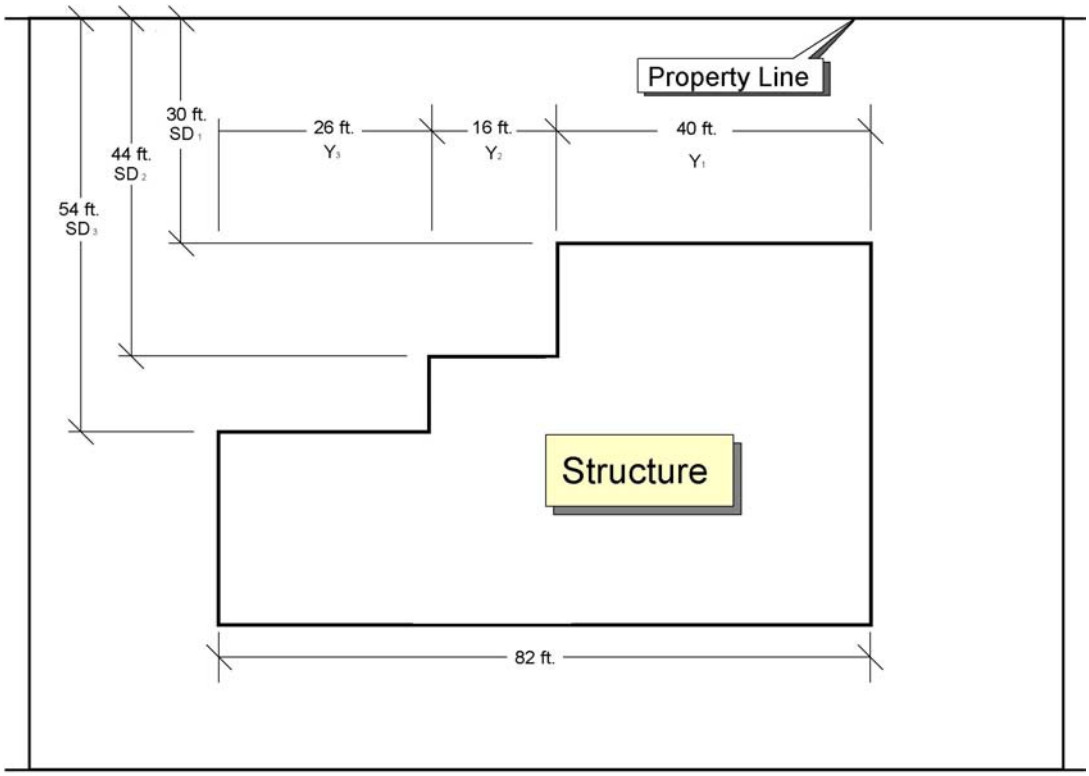


Figure 1.6-2 - Average Setback

Example: Average Setback = 40.34 ft.

y_1	=	40 ft. ÷ 82 ft. = 0.4878% = 49%
SD_1	=	30 ft.
y_2	=	16 ft. ÷ 82 ft. = 0.1951% = 19%
SD_2	=	44 ft.
y_3	=	26 ft. ÷ 82 ft. = 0.3171% = 32%
SD_3	=	54 ft.

(0.4878 X 30) + (0.1951 X 44) + (0.3171 X 54) = 40.34 ft. Average Setback

Base - Lowest (and often widest) visible part of a building, often distinctively treated. A base is distinguished from a foundation or footing in being visible rather than buried.[1]

Base Flood - ~~Flood that has a one percent chance of occurring in any given year. Also commonly referred to as the 100-year Flood, the Base Flood has been adopted by the Federal Emergency Management Agency (FEMA) for Floodplain management purposes, and refers to a flood event that inundates the entire 100-year Floodplain. See Floodplain, 100-Year and Flood, 100-Year.~~ See "Base Flood" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Base Flood Elevation - See "Base Flood Elevation" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Basement - See "Basement" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Basin - Topographical entity within which all the surface water draining to a certain point falls; some of the surface water may come from ground water fed by geologic strata outside the Basin.

Bed and Breakfast - See Home Business for Bed and Breakfast businesses that rent up to two bedrooms within owner-occupied dwellings. See Section 3.0.30.03.u.3 for other Bed and Breakfast businesses.

Below-grade Crawlspace - See "Below-grade Crawlspace" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Best Management Practices - Strategies for improving runoff water quality that are accepted throughout the industry . They include structural and nonstructural measures to control pollutants at the source before they enter a stream.

a. Structural BMPs include:
1. Retention Basins
2. Detention Basins
3. Constructed Wetlands
4. Infiltration Practices
5. Filters
6. Bioretention
7. Biofilters (swales and filter strips).

b. Nonstructural BMPs include:
1. Street sweeping
2. Illicit connection identification and elimination
3. Public education and outreach
4. Land use modifications to minimize the amount of impervious surface area

[1] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

5. Waste collection
6. Proper materials storage.

Beneficial Uses - Beneficial Uses assigned by basin in the Oregon Administrative Rules for water quality and for Corvallis streams are as follows: public and private domestic water supplies, industrial water supplies, irrigation, livestock watering, anadromous fish passage, salmonids fish rearing and spawning, resident fish and aquatic life, wildlife and hunting, fishing, boating, water contact recreation, aesthetic quality, and hydro power, unless changed through a use attainability analysis.

Bioswale - Constructed shallow, wide vegetated ditch through which storm runoff travels and that uses natural methods of cleaning water such as sediment trapping and microorganism activity to remove pollutants.

Block - Tract of land bound by a connecting network of public or private streets with sidewalks. When necessary to minimize impacts to a designated wetland, to slopes greater than 15 percent, to parks dedicated to the public, and/or to Significant Natural Features, blocks may be bound by walkways without streets.

Bond - Form of security in an amount and form satisfactory to the City. See Performance Guarantee in Section 2.4.40.09.

Buffer - Area designed to provide space or distance, obstruct undesirable views, serve as an acoustic barrier, or generally reduce impacts of adjacent development.

Building - Structure having a roof supported by columns or walls and used or intended for the shelter, housing, or enclosure of any individuals, animals, processes, equipment, goods, or materials of any kind.

Building Codes - See "Building Codes" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Building Elevation - Scale drawing of the side, front, or rear of a given structure.

Building Envelope - Portion of a lot or development site exclusive of the areas required for front, side, and rear yards and other required open spaces; and which is available for siting and constructing a building or buildings.

Building Height - See Height of Buildings.

Building Line - Line on a plat indicating the limit beyond which buildings or structures may not be erected, or the minimum distance as prescribed by this Code between the property line abutting a street and the closest point of the foundation of any related building or structure.

Building Official - Development Services Manager.

Building Types -

a. **Nonresidential** - Group of building types comprising the following:

1. Detached - One main building, freestanding and structurally separated from other buildings.

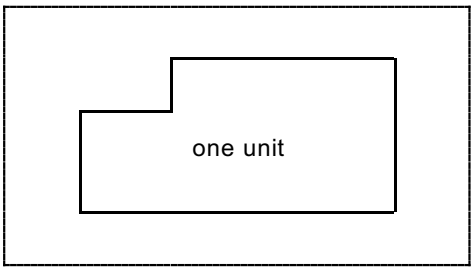


Figure 1.6-3 - Nonresidential Detached

2. Attached - Two or more main buildings placed side by side so that some building walls are in common for a minimum length of five ft. Fences, trellises, etc. attached between buildings do not create Attached structures.

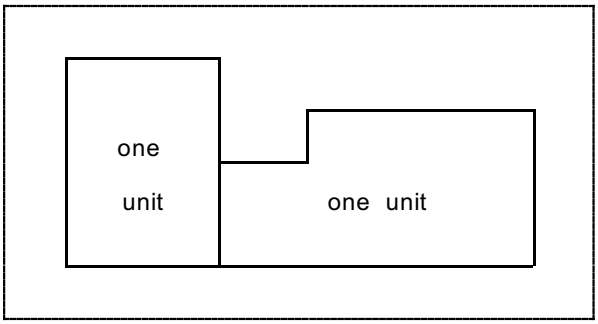


Figure 1.6-4 - Nonresidential Attached

b. **Residential** - Group of building types comprising the following:

1. Single Detached - One dwelling unit, freestanding and structurally separated from other dwelling units or buildings, located on a lot or development site. Includes Manufactured Dwellings.

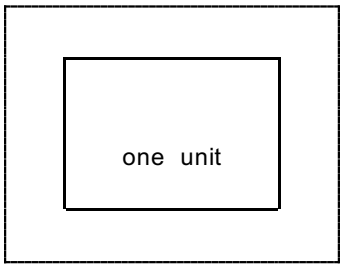


Figure 1.6-5 - Residential Single Detached

2. Single Detached (Zero Lot Line) - One dwelling unit, freestanding and structurally separated from other buildings, with no setback from one lot line.

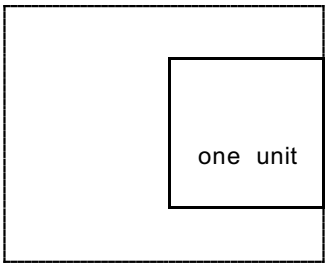


Figure 1.6-6 - Residential Single Detached (Zero Lot Line)

3. Duplex - Two dwelling units on a single lot placed side by side so that some building walls are in common for a minimum length of five ft. Fences, trellises, etc. attached between buildings do not create Attached units. Stacked duplex units (where one unit is on top of another) are acceptable.

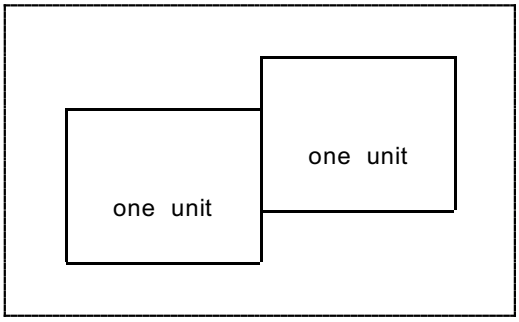


Figure 1.6-7 - Residential Duplex

4. Single Attached (Zero Lot Line) - Two dwelling units on separate lots, but placed side by side so that some building walls are in common for a minimum length of five ft. at a common property line. Fences, trellises, etc. attached between buildings do not create Attached structures.

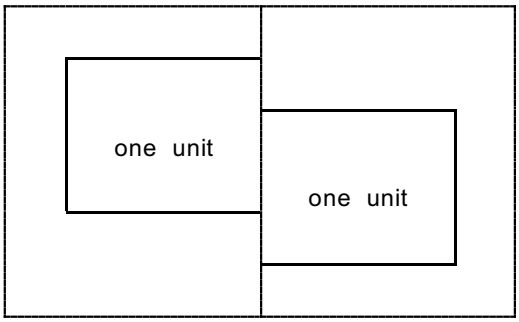


Figure 1.6-8 - Residential Single Attached (Zero Lot Line)

5. Attached - Three or more dwelling units on separate lots, but placed side by side so that some building walls are in common for a minimum length of five ft. at a common property line. Fences, trellises, etc. attached between buildings do not create Attached structures.

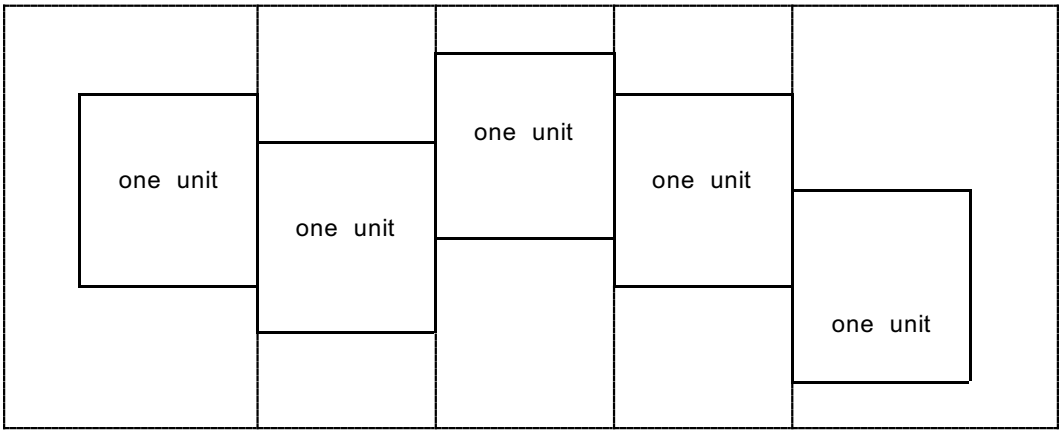


Figure 1.6-9 - Residential Attached

6. Multi-dwelling - Three or more dwelling units in any vertical or horizontal arrangement, located on one lot or development site, and where some building walls are in common for a minimum length of five ft. Fences, trellises, etc. attached between buildings do not create Attached units.

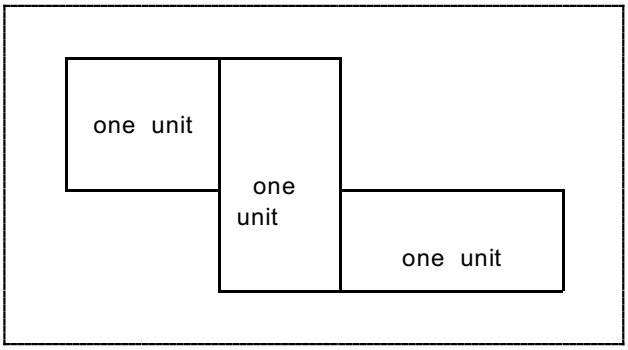


Figure 1.6-10 - Residential Multi-dwelling

7. Manufactured Dwelling Facility - Facility where four or more manufactured or mobile homes are within 500 ft. of one another on a lot, tract, or parcel of land under the same ownership. The primary purpose of the facility is to rent spaces for manufactured or mobile homes. The applicable Oregon Revised Statutes that pertain to Manufactured Dwellings and facilities are ORS 446.155 through ORS 446.285, and ORS 455.010. The Oregon Administrative Rule pertaining to Manufactured Dwellings is OAR Chapter 918, Division 500-520. The State of Oregon Manufactured Dwelling and Park Specialty Code, which is a min/max code, governs construction requirements for manufactured and mobile homes.

8. Accessory Dwelling Unit - One dwelling unit, either detached or structurally attached, located on the same lot as at least one other dwelling unit. Provisions for Accessory Dwelling Units require that the owner of the lot occupy either the main residence or

the Accessory Dwelling Unit. See Section 4.9.40 of Chapter 4.9 - Additional Provisions for additional development standards.

c. The following terms are **not** considered Building Types for purposes of this Code, but some are considered Housing Types for the purposes of meeting Code requirements for Housing Type variations. See Housing Types.

1. Cluster - Dwelling units arranged to retain open space areas equal to or greater than the cumulative total open space areas normally required under the applicable zone; the permitted gross density of a site is maintained.

2. Condominium - Form of ownership where the owner has a deed to a volume of space; governed by the provisions of ORS Chapter 100, as amended.

3. Townhouse - Three or more Attached dwelling units, each on a separate lot, often with two stories and with ground floor access.

4. Rowhouse - Three or more Attached dwelling units, each on a separate lot.

5. Triplex, Fourplex, Fiveplex, Sixplex, etc. - Multi-dwelling with three or more Attached dwelling units on the same lot.

6. Apartment House - Multi-dwelling building or portion thereof designed, built, rented, leased, let, or hired out to be occupied; or the residence of three or more families living independently of one another.

Carport - Roofed structure or a portion of a building open on two or more sides; used primarily for parking of motor vehicles.

Catchment - Watersheds that are defined by the lowest points of elevation in a site. The Catchment includes all watersheds defined by streams exiting the site and by streams draining to the interior of the site.

Cemetery - Land used or intended to be used for burial of the dead and related Cemetery activities, including columbarium, crematoriums, mausoleums, and mortuaries, when operated in conjunction with and within the boundary of the Cemetery.

Certified Local Government (CLG) - City or county that has been certified by the National Park Service, U.S. Department of the Interior, to carry out the purposes of the National Historic Preservation Act of 1966, as amended. The CLG program is administered by the State Historic Preservation Office (SHPO). The City of Corvallis is a Certified Local Government.

Church - Permanently located, fully enclosed building used primarily for religious worship.

City - City of Corvallis, a municipal corporation of the State of Oregon, involved in activities in either its governmental or its corporate capacity; otherwise, that officer, department, or agency of the City

indicated by the context; or City Manager where the context does not clearly indicate a specific officer, department, or agency.

City Limits - Boundary line that identifies land within the City.

Compatible - Ability of different uses to exist in harmony with each other. "Making uses compatible with each other" implies site development standards that regulate the impact of one use on another.

Comprehensive Neighborhood - Primarily residential area that offers a range of uses to provide for the daily needs and activities of residents within easy walking distance of residences. Comprehensive Neighborhoods contain a variety of housing opportunities, at overall densities that can support appropriately scaled commercial development and viable public transportation. The core of a Comprehensive Neighborhood contains a Major Neighborhood Center that serves community-wide shopping and office needs. The design of a Comprehensive Neighborhood fosters a sense of community with safe, vital public areas, while working to ensure compatibility and effective transitions between diverse uses.

Comprehensive Plan Amendment - Amendment to either the boundaries of Comprehensive Plan Map designations shown on the Official Comprehensive Plan Map or an amendment to the text of the Comprehensive Plan. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.1 - Comprehensive Plan Amendment Procedures.

Conceptual Development Plan - Land use process that is a type of Conditional Development and that provides a mechanism for achieving greater flexibility and improved design where the scope of the proposed modifications to this Code's pre-stated standards exceeds that permitted through Chapter 2.12 - Lot Development Option. This type of land development project is comprehensively planned as an entity via a unified site plan. Often it is proposed to allow for better preservation of Significant Natural Features and/or for innovation in site planning and architectural design. Approval requires compensating benefits that off-set the requested development standard modifications. The request must be followed by or processed concurrently with a Detailed Development Plan and the issuance of Building Permits is withheld until a Detailed Development Plan is approved. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 2.5 - Planned Development, and Section 2.5.40 - Conceptual Development Plan Review Procedures.

Conditional Development - Land use process that provides an opportunity to allow a use when potential adverse effects can be mitigated or deny a use if concerns cannot be resolved to the satisfaction of the hearing authority. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.3 - Conditional Development.

Conditional Development Modification - Land use process that provides an opportunity to allow a limited amount of flexibility with regard to site planning and architectural design for a previously approved Conditional Development and provides benefits within the development site that compensate for requested variations from approved Conditional Development such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in

Section 1.2.110.02 - General Development and Section 2.3.40 - Conditional Development Modification.

Conditions of Approval - Requirements placed on a development for a number of purposes, which include but are not limited to:

a. Ensuring adherence to the proposal that is approved;

b. Ensuring that adequate public and private services and facilities are provided, consistent with adopted transportation and facility plans and applicable regulations;

c. Ensuring that Natural Resources and Natural Hazards issues are addressed consistent with the applicable criteria and regulations;

d. Bringing the development into compliance with applicable criteria and regulations, including but not limited to Comprehensive Plan Policies and/or this Code's standards;

e. Helping to assure that negative impacts of a development are mitigated up front, particularly in the case of Conditional Development approvals; and

f. Assisting applicants by identifying some of the requirements that will affect subsequent related application requests such as Final Plats, Building Permits, construction permits, Public Improvement by Private Contract (PIPC) Permits, etc.

Conservation Easement - Nonpossessory interest of a holder in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic, or open space values of real property; ensuring its availability for agricultural, forest, recreational, or open space use; protecting Natural Resources or Natural Hazards; maintaining or enhancing air or water quality; or preserving the historical, architectural, archaeological, or cultural aspects of real property. Also defined in ORS 215.715, as ameded.

Consolidation - Elimination of property line(s) of unplatted land to create a single unit of land.

Contiguous - Same as Adjacent. Properties separated by a street may also be considered contiguous.

Contractor Sidewalk/Street Stamps - Insignia or mark stamped into a sidewalk or street that includes information, such as the contractor's name and the date the work was performed, and which indicates that the stamp dates from 1956 or before.

Cornice - Any molded projection which crowns or finishes the part to which it is affixed. Also, the exterior trim of a structure at the meeting of the roof and wall;

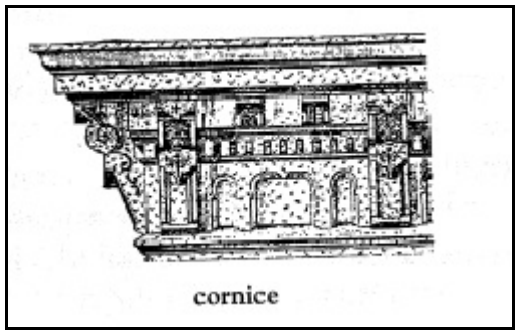


Figure 1.6-11 - Cornice

usually consists of bed molding, soffit, fascia, or crown molding.[2] See Figure 1.6-11 - Cornice

Corvallis Register of Historic Landmarks and Districts (Local Register) - City's official list of Locally-designated Historic Resources.

Corvallis Streams – All streams that are located either in part or entirely within the City's Urban Growth Boundary.

Critical Facility - See "Critical Facility" in Section 1.6.40. *[ORS 455.447 & Model Ordinance Section II - Definitions]*

Cupola - Small dome or tower-like structure on a roof.

Datum - The vertical datum is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NAVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88). *[Model Ordinance Section II - Definitions]*

Day(s) - Calendar days unless working days are specified.

Day Care, Commercial Facility - Institution, establishment, or place that commonly receives at one time more than 12 persons for a period not to exceed 12 hours per day. The facility provides the persons with board, care, or training apart from their parents or guardians for compensation or reward in accordance with ORS 657A.250-440, as amended. Refer to Section 4.9.70 of Chapter 4.9 - Additional Provisions for additional development standards (area per child and buffering).

Day Care, Family - Babysitting, care of 12 or fewer children, including resident family members, as accessory to any residential use. Family day care is not subject to the definition of Home Business.

Density - Number of dwelling units per acre of land, calculated in accordance with the definition for Density Calculation.

Density Calculation - Density is calculated as either gross density or net density. The minimum density for a site is net density and the maximum density is gross density.

a. **Density, Gross** - Number of dwelling units per gross area, in acres. See definition for Area, Gross. Additionally, in calculating gross density for a Minor Land Partition site, applicants may include in their calculation 50 percent of the area of any street rights-of-way that front the subject site, for the distance the streets front the subject site.

b. **Density, Net** - Number of dwelling units per net area, in acres. See definition for Area, Net.

[2] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

c. **Fractions** - When the sum of the dwelling units is a fraction of a dwelling unit, and the fraction is equal to or greater than 0.5, an additional dwelling unit shall be required (minimum density) or allowed (maximum density). If the fraction is less than 0.5, an additional dwelling unit shall not be required or allowed.

Density Transfer - Permits residential density under a single development application to be shifted from one part of a development site and added to another part of the same site. It can be used to protect Significant Natural Features that are on the development site without losing overall density in the development. Density transfer does not permit an increase in the gross density for the entire development site.

Dentil - See Figure 1.6-12 - Dentils. One of a band of small, square, tooth-like blocks forming part of the characteristic ornamentation of the Iconic, Corinthian, and Composite orders, and sometimes Doric.[3]

Dentil Band - See Figure 1.6-12 - Dentils

a. Molding that occupies the position of a row of Dentils in classical architecture.

b. Course of masonry that resembles a row of Dentils; for example, in brickwork, the tooth-like effect produced by the projection of alternate headers and smaller blocks.[3]

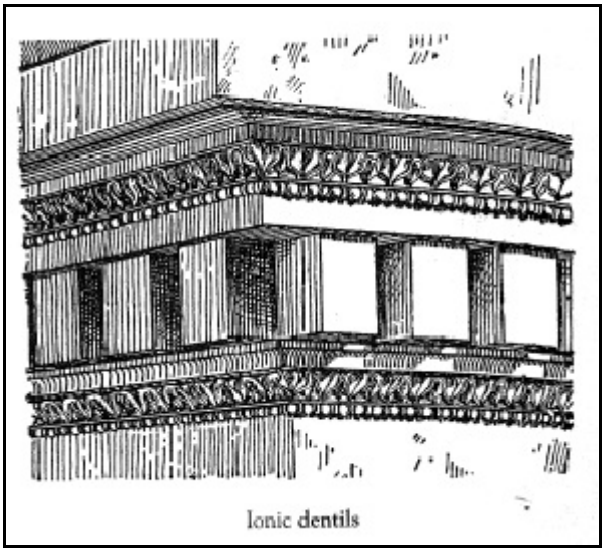


Figure 1.6-12 - Dentils

Designated Historic Resource - Historic resource that has been determined through an official action to meet criteria for Historic Significance, resulting in the resource being Locally-designated and/or Nationally-designated, as more specifically defined below. Chapter 2.9 - Historic Preservation Provisions applies to all Designated Historic Resources, regardless of whether they are Locally- or Nationally-designated. Some Designated Historic Resources are listed in both the Local Register and the National Register of Historic Places.

a. **Locally-designated** - Locally-designated Historic Resource is listed in the Corvallis Register of Historic Landmarks and Districts (Local Register). To list a property in the Local Register, a property owner must obtain approval for a Zone Change to apply a Historic Preservation Overlay to the subject property. A Historic Preservation Overlay denotes the Locally-designated Historic Resource on the City's Zoning Map. Property owner approval for local designation is required.

b. **Nationally-designated** - Nationally-designated Historic Resource is listed in the National Register of Historic Places. To list a property in the National Register of Historic Places, approval must be obtained in accordance with state and federal processes and criteria listed in 36 CFR 60. Local level input regarding a proposed National Register of Historic

[3] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

Places nomination normally is solicited; however, official local action does not occur. Because Nationally-designated Historic Resources are subject to the Historic Preservation Provisions of Chapter 2.9, a notation indicating that a property is listed in the National Register of Historic Places is included on the City's Zoning Map.

DSL - Oregon Department of State Lands.

Detailed Development Plan - Land use process that is a type of Conditional Development and that provides a mechanism for achieving greater flexibility and improved design where the scope of the proposed modifications to this Code's pre-stated standards exceeds that permitted through Chapter 2.12 - Lot Development Option. This type of land development project is comprehensively planned as an entity via a unified site plan and must be based on a previously or concurrently approved Conceptual Development Plan. Such Plans are often proposed to allow for better preservation of Significant Natural Features and/or for innovation in site planning and architectural design. Approval requires compensating benefits that off-set the requested modifications to development standards. A Detailed Development Plan provides sufficient information for the issuance of building permits. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 2.5 - Planned Development, and Section 2.5.50 - Detailed Development Plan Review Procedures.

Detention Basin - Constructed pond and/or underground facility that is designed to temporarily collect runoff from a development to maintain the runoff rate to a specified pre-development flow.

Developer - Any person, including a governmental agency, undertaking development.

Development - Making a material change in the use or appearance of a structure or land, dividing land into two or more parcels, changing the land use designation, or creating or terminating a right of access. Where appropriate to the context, development refers to the act of developing or the result of development. For the definition of Development as applied to the 100-year Floodplain regulations contained in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, please see Section 1.6.40, below. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Development Constraints - Conditions that limit or preclude development of an area or site such as location within: a Natural Hazard on the Natural Hazards Map; a Riparian Corridor or Wetlands on the Riparian Corridors and Wetlands Map; an area of Significant Vegetation on the Significant Vegetation Map; a 4th-level water service area (not served by City water); and/or an area that is permanently preserved via a conservation easement or a drainageway easement/dedication.

Development Constraints -- Development Constraints that no longer preclude development due to the application of the Minimum Assured Development Area (MADA) provisions. A formerly constrained area is one which would be protected through the Development Constraints in Chapters 4.5, 4.11, 4.12, ~~or~~ 4.13, or 4.14, but can be developed by applying the MADA provisions in Chapter 4.11. Development can occur on the site and the constraining factors such as significant vegetation, etc. may be removed or reduced to accommodate the development. However, for MADA development in Floodway Fringe Areas, there are default standards required and they are the Partial Protection Floodplain Provisions. See Section 4.5.20.03 and **Formerly Constrained Areas**.

Development, Intensity of - Relative measure of development impact as defined by characteristics such as the number of dwelling units per acre, amount of traffic generated, and amount of site coverage.

Development-related Concerns - Issues that are worthy of special attention for the developer or for permitting agencies. These issues are identified on the Notice of Disposition for a development approval and are generally raised during the development review process.

Development Site - Legally established lots, parcels, or tracts of land involved in a land use application or building/construction permit application. Sites that are occupied or capable of being occupied by a building or group of buildings including accessory structures and accessory uses, together with yards or open spaces, setback areas, and access as required by this Code.

Digital Flood Insurance Rate Map - See "Digital Flood Insurance Rate Map" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Director - Community Development Director of the City of Corvallis, or the Director's official designee, with responsibility for administration of this Code.

Director's Interpretation - Land use process that seeks the Director's interpretation of either this Code or Comprehensive Plan provisions. These Interpretations may be legislative or quasi-judicial in nature. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.16 - Request for Interpretation.

Discontinued Use - Use that has ceased to be active. Shall not require a determination of the voluntary or involuntary nature of the discontinuance or intent to resume the use. Rental payments or lease payments and taxes are not considered a continued use.

Dominant Cover Type - One or more vegetative species that provide a minimum of 20 percent area cover within the corresponding vegetative layer.

Downtown Parking Assessment District - Portion of the downtown in which property owners contributed to the construction of parking facilities. Within the area shown below in Figure 1.6-13 - Downtown Parking Assessment District, new development has no required new parking to be constructed.

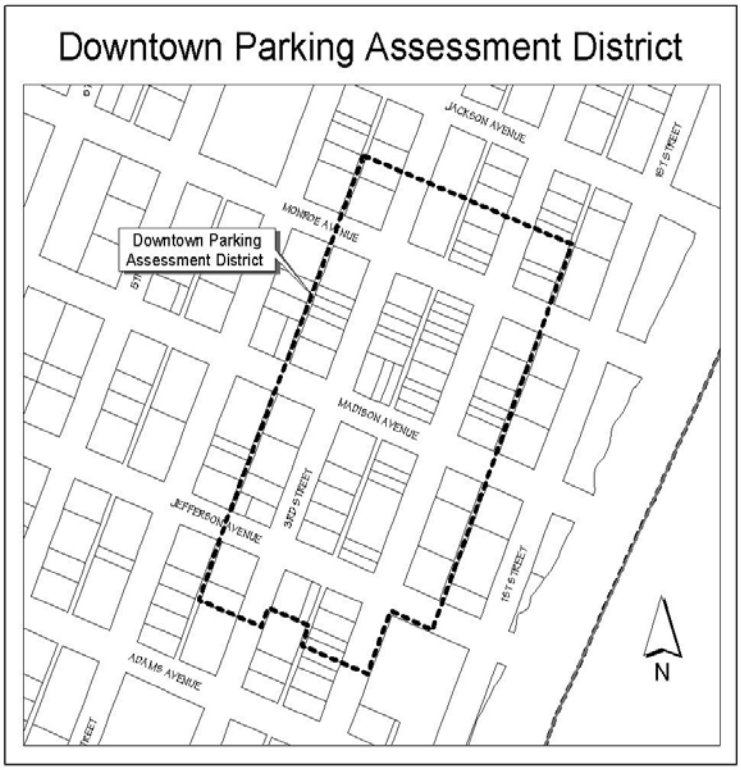


Figure 1.6-13 - Downtown Parking Assessment District

Downtown Pedestrian Core Area - As indicated below in Figure 1.6-14 - Downtown Pedestrian Core Area, an area bound by the Willamette River on the east, Fifth Street on the west, Jackson Avenue on the north (excluding the Benton County Courthouse),and Jefferson Avenue on the south (including Adams Avenue between Second and Third Streets).

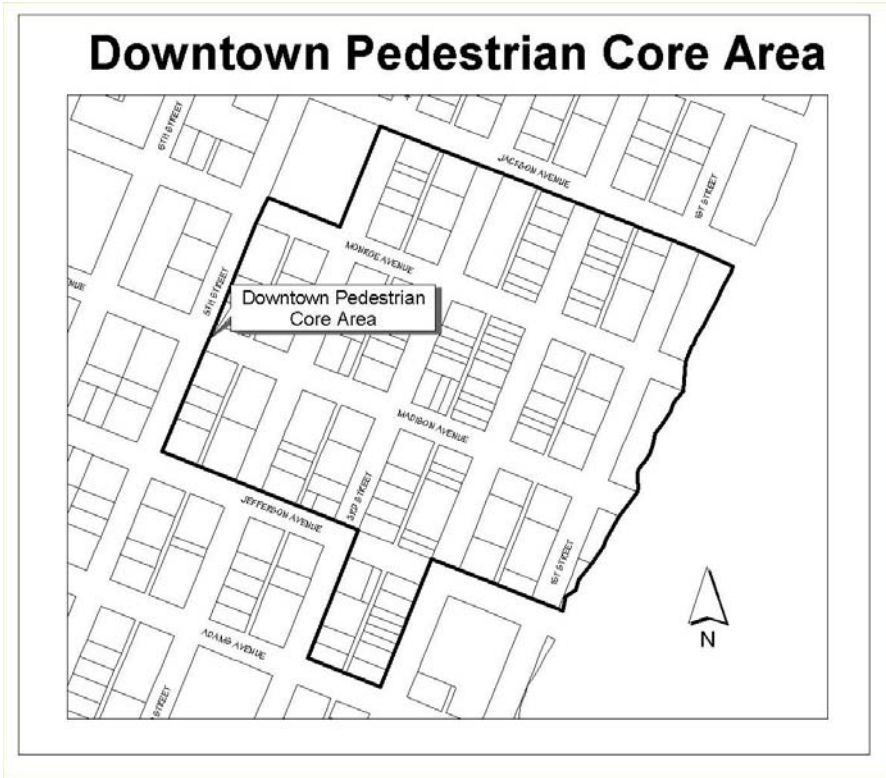


Figure 1.6-14 - Downtown Pedestrian Core Area

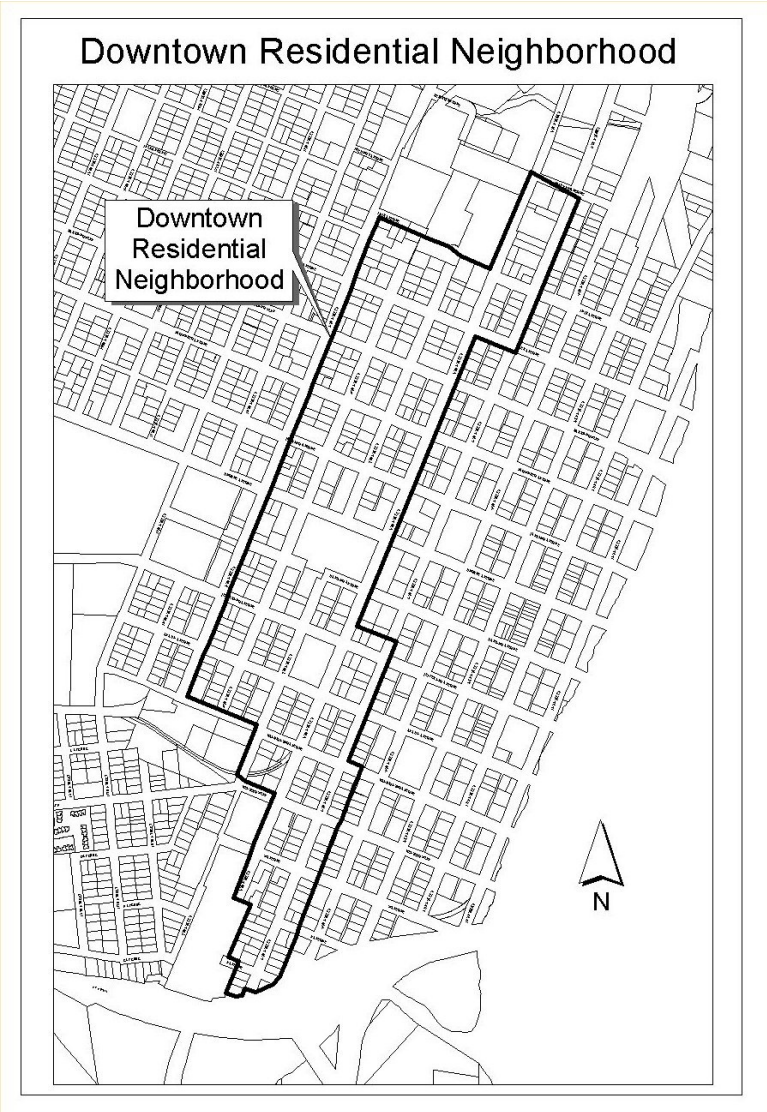


Figure 1.6-15 - Downtown Residential Neighborhood

Downtown Residential Neighborhood - Area generally bound by Sixth Street on the east, Ninth Street on the west, Fillmore Avenue on the north, and Mary's River on the south. This area is intended to provide housing in close proximity to the Central Business Zone and is identified below in Figure 1.6-15 - Downtown Residential Neighborhood.

Drainageway - Natural or artificial Watercourse, including adjacent Riparian Vegetation, that transmits natural Stream or stormwater runoff from a higher elevation to a lower elevation.

Drainageway Dedication - Transfer, in fee-simple, of ownership of a given piece of property for the purpose of stormwater functions.

Drive-Through Facilities - Facilities that provide services directly to patrons in motor vehicles. These types of facilities typically rely on a long driveway or lane that provides adequate room for vehicle stacking at a drive-up service window.

Dwelling Unit - One or more rooms, with bathroom and kitchen facilities (limited to one kitchen only), designed for occupancy by one family. See Family.

Easement - Right that a person has to use another's land for a specific purpose, such as for access or for utilities.

Ecological Restoration - Restoration is the process of repairing damage to the diversity and dynamics of ecosystems. Ecological Restoration is the process of returning an ecosystem as closely as possible to pre-disturbance conditions and functions.

Economically Feasible Rehabilitation - Relative to Designated Historic Resources, rehabilitation is economically feasible where the cost required to bring the structure up to minimum Building Code standards while maintaining its Historic Integrity does not exceed 75 percent of the

structure's replacement value at a similar quality of construction. Calculations required in this definition shall be developed as follows:

a. Estimates for the cost of bringing a structure up to minimum Building Code standards shall be limited to the costs associated with improving a structure to meet minimum Building Code standards - without regard to costs associated with other desired improvements;

b. With respect to estimates for the cost of bringing a structure up to minimum Building Code standards, three estimates from contractors licensed in the State of Oregon shall be provided; and

c. Replacement Value as used in this definition shall equal the Benton County Assessor's Office figures for Replacement Value.

Effects of Buoyancy - Uplift force of water on a submerged or partially submerged object.

Elevated Building - See "Elevated Building" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Endangered Species - Any species that is in danger of extinction throughout all or a significant portion of its range.

Endangered Species Act (ESA) - Federal regulatory program to protect fish, wildlife, and plants from extinction. It provides a means whereby the ecosystems upon which threatened and endangered species depend may be conserved to ensure the continued survival of the species.

Enhance - To augment into a more desirable condition. In the context of natural features regulations, to improve the functions and values of an existing Natural Resource.

Erosion - Movement or displacement of soil resulting from natural and human-induced processes including weathering, dissolution, abrasion, corrosion, and transportation.

Excavation - Process of mechanically altering the natural grade by stripping or cutting and/or filling the earth. See Grading.

Existing Building or Structure - See "Existing Building or Structure" in Section 1.6.40. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*

Extension of Services - Land use process that implements City Charter Section 51 and allows an extension of City sanitary sewer, storm sewer, and/or water services outside the City limits in limited circumstances. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.7 - Extension of City Services Outside the City Limits.

Family - Individual or two or more persons related by blood, adoption, or marriage, or a group of not more than five adults unrelated by blood or marriage, living together in a dwelling unit. As used in this Code, Family also refers to not more than five unrelated physically or mentally handicapped, elderly, or drug- or alcohol-dependent persons receiving treatment, and any number of resident

staff persons engaged in their care. The relevant Oregon Revised Statutes that pertain to this definition include ORS 197.660(2) and ORS 197.665, as amended.

Family Day Care - See Day Care, Family.

FAR - See Floor Area Ratio.

Federal Emergency Management Agency (FEMA) - See "Federal Emergency Management Agency (FEMA)" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Final Plat - Final recorded version of a Subdivision plat, Replat, or Partition plat.

Final Plat, Partition - Final recorded map, diagram, drawing, replat, or other writing containing all the descriptions, locations, specifications, provisions, easements, dedications, and information concerning a partition.

Final Plat, Subdivision - Final recorded map, diagram, drawing, replat, or other writing containing all the descriptions, locations, specifications, provisions, easements, dedications, and information concerning a Subdivision.

Fire Fuel Break Safety Area - Area maintained or constructed, through the reduction of combustible vegetation and other fire fuel materials around structures, to prevent the spread of fires, and the resulting damage to life and property, and/or the area provided for safer fire suppression operations.

Fish-bearing Streams - Fish-bearing streams are those indicated on maps developed by the Oregon Department of Fish and Wildlife and the Oregon Department of Forestry or those where fish presence is documented by the Natural Features Inventory or a recognized fish biologist.

Fish Habitat - Areas upon which fish depend in order to meet their requirements for spawning, rearing, food supply, and migration.

Flag Lot - Lot not meeting the minimum street frontage requirements and that gains access to the nearest public or private street (private street must be within a separate tract) by means of a narrow strip of land.

Flood or flooding - See "Flood or flooding" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Flood Insurance Rate Map (FIRM) - ~~Official map on which the Federal Insurance Administration has delineated areas of special flood hazards and the risk premium zones applicable to portions of the community.~~See "Flood Insurance Rate Map (FIRM)" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Flood Insurance Study (FIS) - See "Flood Insurance Study" in Section 1.6.40. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*

Flood, 100-year - ~~Flood with a one percent chance of occurring in any given year. This is the flood most commonly used for regulatory purposes and is called the Base Flood. As shown below in Figure 1.6-16 - Floodplain Cross Section, this flood event inundates the entire 100-year Floodplain. See Base Flood.~~ See "Flood, 100-year" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*

Floodplain - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks.~~ See "Floodplain" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*

Floodplain Development Permit - See "Floodplain Development Permit" in Section 1.6.40. *[44 CFR 60.3(a) & Model Ordinance Section III-D]*

Floodplain Functions - ~~Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.~~ See "Floodplain Functions" in Section 1.6.40. *[Current Code, just moved]*

Floodplain, 100-year - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. See Base Flood and 100-year Flood.~~ See "Floodplain, 100-year" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*

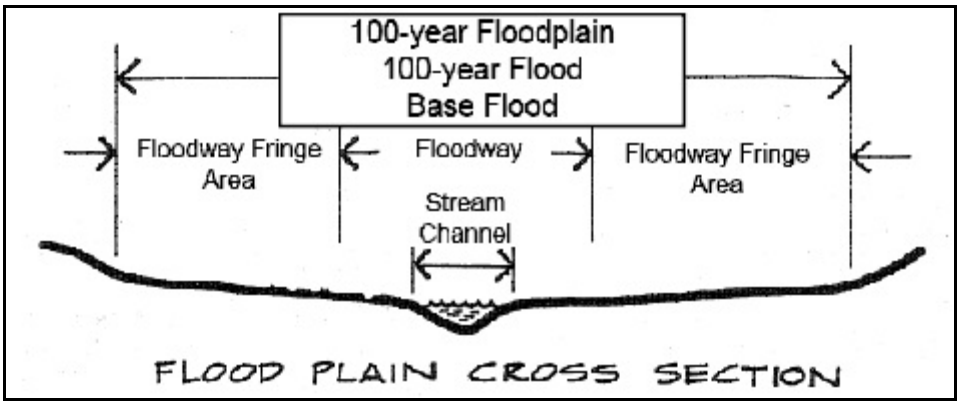


Figure 1.6-16 - Floodplain Cross Section

Floodway (Regulatory Floodway) - See "Floodway (Regulatory Floodway)" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Floodway, 0.2-ft. - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than 0.2 ft.~~See "Floodway (Regulatory Floodway)" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Floodway, 1.0-ft. - ~~As shown below in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than 1.0 ft.~~See "Floodway (Regulatory Floodway)" in Section 1.6.40.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Floodway Fringe - ~~As shown in Figure 1.6-16 - Floodplain Cross Section, the area of the 100-year Floodplain lying outside of the Floodway. Context is the 0.2-ft. Floodway, unless specifically identified as the 1.0-ft. Floodway. See Floodway, 0.2-ft. and Floodway, 1.0-ft.~~See "Floodway Fringe" in Section 1.6.40. *[Current Code, just moved]*

Floor Area Ratio (FAR) - Gross floor area of all buildings on a lot or development site divided by the net area of a lot or development site on which the buildings are located. See Area, Net. In cases where outdoor areas are directly related to the subject land use(s) (e.g., outdoor storage areas; planting areas for nurseries, tree farms, and agricultural businesses; portions of parking lots used for storage and circulation of moving vans associated with moving businesses; etc.), these outdoor areas may be included in the Floor Area Ratio square footage calculation. However, unless specified otherwise, in no case shall standard parking and circulation areas, landscaping, etc., be included in the Floor Area Ratio square footage calculation.

Flow-through Design - ~~Typically a structure that does not hinder or obstruct the movement of or displace surface floodwater.~~ See "Flow-through Design" in Section 1.6.40. *[Current Code, just moved]*

Formerly Constrained Areas - Areas that contain areas that would be protected through the Development Constraints in Chapters 4.5, 4.11, 4.12, or 4.13, or 4.14, but can be developed by applying the MADA provisions in Chapter 4.11. Formerly Constrained Areas can be developed, and the constraining factors such as significant vegetation may be removed or reduced to accommodate the development. However, for MADA development in Floodway Fringe Areas, there are default standards required and they are the Partial Protection Floodplain Provisions. See Section 4.5.20.03 and **Development Constraints - Former**.

Frontage - Portion of a development site that abuts a public or private street.

Full-line Department Store - Store that provides a depth and variety of general merchandise, apparel, furniture, appliances, and home furnishings.

General Development Decision - Development decision that requires some discretion in applying the criteria and standards of this Code. Requires review and approval by staff without a public hearing; public notice prior to the staff decision; and the mailing of a Notice of Disposition to persons who responded in writing to the public notice. Appeals are made in accordance with Chapter 2.19 - Appeals.

Geographic Information System (GIS) - System of hardware, software, and data storage that allows for the analysis and display of information that has been geographically referenced.

Grade - (1) Average elevation of the land; (2) the percent of rise or descent of a sloping surface. Usually described as Finished Grade or Natural Grade, and measured in feet above sea level. There is a distinction between percent of slope and degree of slope. For example, a forty-five degree slope is a 100 percent grade. See also Slope.

Grade, Finished - As shown in Figure 1.6-17 - Cut and Fill Cross Section, final elevation of the ground level after development.

Grade, Natural - As shown in Figure 1.6-17 - Cut and Fill Cross Section, elevation of the ground level in its natural state, before construction, filling, or excavation.

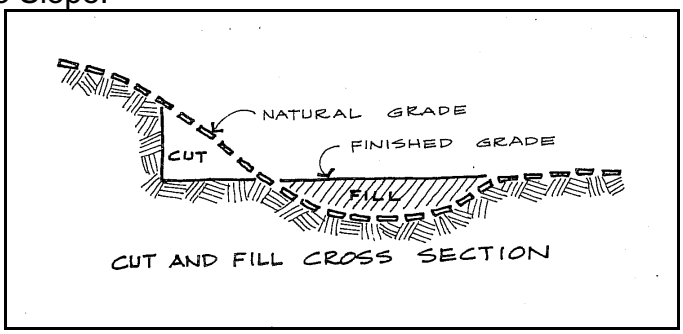


Figure 1.6-17 - Cut and Fill Cross Section

Grading - Stripping, cutting, filling, or stockpiling of earth or land, including the land in its cut or filled condition, to create new grades.

Green Area - Includes a site's landscaping, private preservation areas, and/or pedestrian amenities such as sidewalks, plazas, multi-use paths, unenclosed patios, and decks. Does not include areas covered by buildings, covered structures enclosed on one or more sides, parking areas, or vehicle circulation areas.

Habitable Floor - Floor usable for living purposes, which includes working, sleeping, eating, cooking, or recreation, or a combination of these.

Health Hazard Annexation - Land use process that addresses health hazard situations and evaluates whether a property meets the criteria for incorporation into the City limits. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.6 - Annexations.

Hearing Authority - City Council or an agency or officer of the Council designated by this Code to conduct public hearings regarding applications for development.

Height of Buildings - Vertical distance above a reference datum measured to the highest point of any non-gabled roof, or to the average height of the highest gable of a pitched or hipped roof. The height of a stepped or terraced building is the maximum height of any segment of the building. The reference datum shall be selected by either of the following, whichever yields a greater height of building:

a. As shown in Figure 1.6-18 - Method 1 below, elevation of the highest adjoining sidewalk or ground surface within a five-ft. horizontal distance of the exterior wall of the building when such sidewalk or ground surface is not more than 10 ft. above lowest grade.

b. As shown in Figure 1.6-19 - Method 2 below, elevation 10 ft. higher than the lowest grade when the sidewalk or ground surface described in "a", is more than 10 ft. above lowest grade.

The height of a stepped or terraced building is the maximum height of any segment of the building.

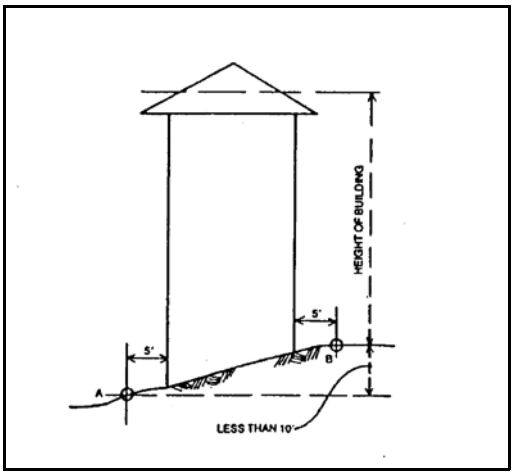


Figure 1.6-18 - Method 1

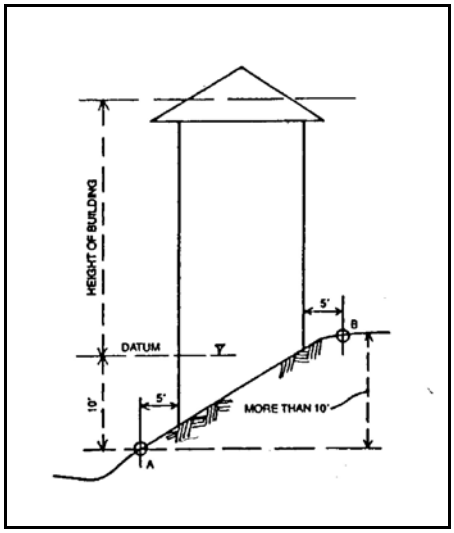


Figure 1.6-19 - Method 2

Highest Adjacent Grade - See "Highest Adjacent Grade" in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Historic Integrity - Integrity of setting, location, materials or workmanship which is determined to be historic by fulfilling at least two of the following criteria:

a. The historic resource is in its original location or is in the location in which it made a historical contribution;

b. The historic resource remains essentially as originally constructed;

c. Sufficient original workmanship and material remain to show the construction technique and stylistic character of a given Period of Significance;

d. The immediate setting of the historic resource retains land uses, or landscaping and relationship with associated structures, consistent with the Period of Significance;

e. The historic resource contributes to the architectural continuity of the street or neighborhood;

f. The site is likely to contain artifacts related to prehistory or early history of the community; or

g. The historic resource is now one of few remaining prime examples of an architectural style or design, or a type of construction that was once common.

Historic Preservation Permit (HRC-level) - Land use process for review of changes to Designated Historic Resources. The changes address Alteration or New Construction, Demolition, and Moving activities not covered by Director-level Historic Preservation Permits, and not covered in Section 2.9.70 - Exemptions from Historic Preservation Permit Requirements. Specific procedures and discretionary review criteria for this type of permit are listed in Sections 2.9.60.c, 2.9.90, 2.9.100, 2.9.110, and 2.9.120. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.9 - Historic Preservation Provisions.

Historic Preservation Permit (Director-level) - Land use process for review of changes to Designated Historic Resources. The changes address Alteration or New Construction activities that are minor in nature, not covered in Section 2.9.70 - Exemptions from Historic Preservation Permit Requirements, and decided upon by the Director. Specific procedures and clear and objective review criteria for this type of permit are listed in sections 2.9.60.c, 2.9.90, and 2.9.100. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.9 - Historic Preservation Provisions.

Historic Resource - Building, district, object, site, or structure that has a relationship to events or conditions of the human past, as defined in OAR 660-023-0200(1)(c) and 40 CFR 60.3.

Historic Significance (or Historically Significant) - Determination made for a resource that is in and of itself significant or that contributes to historic and cultural resources of the community. Such a determination is made when the resource is 50 years old or older and when at least one of the additional criteria listed below applies to it. Resources that are less than 50 years old may be considered eligible for historic designation if they are of exceptional importance, based on National Register of Historic Places Criteria for Evaluation (36 CFR 60).

a. It is associated with events that have made a significant contribution to the broad patterns of political, economic, cultural, or industrial history of the City, county, state or nation;

b. The resource is fundamentally related to the work, achievements, or life story of a person, group, organization, or institution that has made a significant contribution to the City, county, state or nation;

c. It embodies distinctive characteristics of a type, Period of Significance, or method of construction;

d. It may be a prime example of an architectural style or design, or may represent a type of construction that was once common and is now one of few remaining examples;

e. It represents the work of a master, i.e., it is a noteworthy example of the work of a craftsman, builder, architect, or engineer significant in City, County, State, or national history;

f. It demonstrates high artistic values in its workmanship or materials;

g. It yields or is likely to yield information important in prehistory or history;

h. It is a visual landmark; or

i. It contributes to the continuity or the historic character of the street, neighborhood, and/or community, or contributes to the Historic Integrity of the Period of Significance represented.

Historically Significant Tree - Historically Significant Tree is defined as a tree that meets the criteria described in “a," “b," or “c," below:

a. A tree that meets all of the following criteria:

1. The tree is located on a Designated Historic Resource property, is at least 50 years old, and has been in existence since a time prior to, or during, the Designated Historic Resource’s Period of Significance;

2. The tree meets the definition of Significant Tree in this Chapter, with the exception that the minimum eight-inch caliper at four ft. above grade requirement does not apply to a tree which, due to its species type, is not anticipated to reach a minimum eight-in. caliper by a 50-year date of maturity; and

3. The tree is consistent with at least one of the statements in “a.3.a” below, in the opinion of the Director. The Director’s opinion shall be based on the items in “a.3.b," below:

   a) Statements -

      1) The tree can be correlated to a Historically Significant event that contributed to Corvallis’ history;
      2) The tree marks the site of a historic event; or
      3) The tree is fundamentally related to the work, achievements, or life story of a person or group, organization, or institution that has made a significant contribution to the City, County, State or nation.

   b) Information for Use by the Director-

      1) Documentation in Section 2.9.60.c and any additional documentation provided by the property owner; and
      2) Consideration of the criteria referenced in “a.3(a)(3),” above relative to the Designated Historic Resource’s Period of Significance.

b. A tree that is either:

1. Identified as a Designated Historic Resource on an individual basis; or

2. In or adjacent to a National Register of Historic Places Historic District, within a private street right-of-way or a public right-of-way, and which meets both criteria “a.1" and “a.2" above, relative to the District.

c. Individually identified as Historically Significant in an official historic inventory for a Designated Historic Resource or an approved National Register of Historic Places nomination;

Historic Structure - See Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Home Business - Lawful commercial activity commonly conducted within a dwelling by members of the family occupying the dwelling, with up to one additional employee not to exceed 40 hours per week. The residential character of the dwelling shall be maintained and the activity conducted in such a manner as not to give an outward appearance nor manifest any characteristic of a business in the ordinary meaning of the term. The activity also does not infringe upon the right of neighboring residents to enjoy the peaceful occupancy of their homes. Garage sales are considered to be home businesses. Bed and Breakfast businesses that rent up to two bedrooms within owner-occupied dwellings are also considered to be Home Businesses. To be considered a Home Business, the Use must comply with all of the following:

a. No display shall indicate from the exterior that the building is being used in whole or in part for any purpose other than a dwelling, except that signage consistent with Section 4.7.90.01 of Chapter 4.7 - Sign Regulations is allowed. Garage sales are exempt from this provision.

b. No outside storage of merchandise or materials. Garage sales are exempt from this provision.

c. The amount of commercial activity is less intensive than activities permitted in a commercial zone.

d. The use will not cause excessive or unusual traffic in the vicinity because of deliveries, pick-ups, parking, sales, or other activities.

e. Noise, smoke, or odors do not exceed those created by normal residential use.

f. Each garage sale is limited in duration to two consecutive days. No more than six garage sales in one calendar year may be conducted at a residence.

Home Occupation - See Home Business.

Homeowners’ Association - Private, incorporated, nonprofit organization operating under recorded land agreements through which each lot owner of a Planned Development or other described land area is automatically subject to a charge for a proportionate share of the expenses for the organization's activities, such as maintaining a common property. Homeowners’ associations are authorized by ORS Chapter 94, as amended, and are not City government organizations.

Household - Domestic establishment including a member or members of a family and/or others living under the same roof.

Housing Types - Residential Housing Types consisting of the following:

a. **Single Detached ≤ 1,200 sq. ft.** - Same as Building Type Single Detached, but containing a total footage less than or equal to 1,200 sq. ft.

b. **Single Detached 〉 1,200 sq. ft.** - Same as Building Type Single Detached, but containing a total footage greater than 1,200 sq. ft.

c. **Single Detached (Zero Lot Line) ≤ 1,200 sq. ft.** - Same as Building Type Single Detached (Zero Lot Line), but containing a total footage less than or equal to 1,200 sq. ft.

d. **Single Detached (Zero Lot Line) 〉 1,200 sq. ft.** - Same as Building Type Single Detached (Zero Lot Line), but containing a total footage greater than 1,200 sq. ft.

e. **Accessory Dwelling Unit** - Same as Building Type Accessory Dwelling Unit.

f. **Single Attached (Two units)** - Same as Building Type Single Attached (Zero Lot Line).

g. **Duplex** - Same as Building Type Duplex.

h. **Attached (Three - Five Units)** - Same as Building Type Attached, but containing three to five dwelling units. Can include such housing types as townhouses, rowhouses, flats, and condominiums.

i. **Attached (〉 five units)** - Same as Building Type Attached, but containing greater than five dwelling units. Can include such housing types as townhouses, rowhouses, flats, and condominiums.

j. **Triplex** - Same as Building Type Multi-dwelling, but containing three dwelling units.

k. **Fourplex** - Same as Building Type Multi-dwelling, but containing four dwelling units.

l. **Apartment Buildings** - Same as Building Type Multi-dwelling, but containing greater than four dwelling units.

Human Occupancy - Consistent with the definition for Habitable Space (Room) from Section 209-H of the 1998 Oregon Structural Specialty Code. Refers to space in a structure for living, sleeping, eating, or cooking. Does not include bathrooms, toilet compartments, closets, halls, storage and utility spaces, and similar areas.

Human Scale - Synonym of pedestrian scale, Human Scale is an informal and relative standard. It suggests that the relationship between a person and the environment, whether natural or human-made, is comfortable, intimate, and contributes to the person's sense of accessibility. Additionally, Human Scale refers to the proportional relationship of a particular building, structure, or streetscape element to the human form and function.

Hydrodynamic Load - ~~Force of water in motion.~~ See "Hydrodynamic Load" in Section 1.6.40. *[Current Code - just moved]*

Hydrostatic Load - ~~Force of water at rest.~~ See "Hydrostatic Load" in Section 1.6.40. *[Current Code - just moved]*

Impact - Consequences of a course of action; the effect of a goal, guideline, plan, or decision.

Improvement Plan - Maps or drawings showing the layout of improvements to be installed as a condition of approval for development.

Infill - Developing vacant and partially vacant land within a built environment. To be considered infill, such land shall be less than 0.5 acres in size for residentially designated lands or less than 1.0 acre in size for lands designated otherwise.

In-kind Repair or Replacement - Repair or replacement of existing materials or features that match the old in design, color, texture, materials, dimensions, shape, and other visual qualities. This includes replacement of roofing, doors, windows, siding, and other structural elements, provided the replacements match the old in the manners described herein. Repair or replacement of windows or doors containing glass that substitute double-pane glass for single-pane glass is not considered to be In-kind Repair or Replacement. Additionally, while the repair or replacement of deteriorated materials In-kind is allowed, it is recommended that repair be considered by the property owner prior to replacement.

Intermittent Stream - See Stream, Intermittent.

Irrigation System - Manual or mechanically controlled method of supplying water to an area that needs it.

Jurisdictional Wetlands - See Wetlands, Jurisdictional.

Key Areas of Exchange - Locations within a watershed where ground water recharge from surface water occurs (e. g., permeable depressions) or where streams are fed by ground water (e.g., springs).

Kitchen - Any room used, intended, or designed for preparation of food and storage of food, including any room with a sink and either a 3/4-in. gas opening or provision for a range or stove.

Land Area, Net - See Area, Net.

Land Development Code Text Amendment - Amendment to the text of this Code. Procedures for this type of land use application are outlined in Section 1.2.80.

Land Division - Land divided to create legally separate areas in one of the following ways:

a. **Partition** - Division of land that creates three or fewer parcels within a calendar year when such parcels exist as a unit or contiguous units of land under single ownership at the beginning of the year. Procedures for this type of land use application are outlined in

Section 1.2.110.02 - General Development and Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments.

A Partition does not include division of land resulting from any of the following:

1. Establishment or modification of a tax lot by the County Assessor;

2. A lien foreclosure, foreclosure of a recorded contract for the sale of real property, or creation of cemetery lots;

3. An adjustment of a property line where an additional unit of land is not created and where the existing unit of land reduced in size by the adjustment complies with any applicable zone criteria established by this Code; or

4. Sale or grant by a person to a public agency or public body for state highway, county road, City street, or other right-of-way purposes provided that such road or right-of-way complies with the applicable Comprehensive Plan policies and ORS 215.213 (2)(q)-(s) and 215.283 (2)(p)-®, as amended. See Lot Line Adjustment.

b. **Subdivision** - Division of land that creates four or more lots within a calendar year when such lots exist as a unit or contiguous units of land under a single ownership at the beginning of such year. A Subdivision does not include division of land resulting from any of the activities in "a," above. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development, Section 1.2.110.03 - Special Development, and Chapter 2.4 - Subdivisions and Major Replats.

Land, Intensity of - Relative measure of development impact as defined by characteristics such as the number of dwelling units per acre, amount of traffic generated, and amount of site coverage.

Land, Parcel of - Unit of land with established boundaries or a unit of land created by a Partition. See Lot for a unit of land created by a Subdivision.

Large Wood (as found in streams) - In the analysis of the local streams of Corvallis that was done for the Endangered Species Act Salmon Listing Response Plan, Large Wood was identified as 10 centimeters (four inches) in diameter and three meters (10 feet) long.

Lateral Addition - See "Lateral Addition" in Section 1.6.40.*[Model Ordinance Section II - Definitions]*

Legal Nonconforming Development - Lawful existing structure or use that does not conform to current requirements of this Code, but which existed before this Code or any amendment to it became effective.

Legislative Decision - Formulation of policy characteristic of the actions by a city council. *Ex parte* contact requirements are not applicable to legislative hearings. In general, personal notice to citizens of proposed changes is not required, although this Code specifies that in some cases, notice shall be mailed to property owners if a decision will change the land use designation. In

general, the burden of being informed rests on the citizen. See also Limited Land Use Decision and Quasi-judicial Decision.

Letter of Map Change (LOMC) - See "Letter of Map Change (LOMC) in Section 1.6.40. *[Model Ordinance Section II - Definitions]*

Limited Land Use Decision - Land use decision made by City staff through an administrative process and that qualifies as a Limited Land Use Decision under ORS 197.195, as amended. Limited land use decisions are among the types of decisions that are reviewed through the process set out in Chapter 1.2 - Legal Framework as General Developments.

Local Register - See Corvallis Register of Historic Landmarks and Districts.

Local Wetlands Inventory (LWI) - See Wetlands, Local Wetlands Inventory.

Locally Protected Locally Significant Wetlands (LPLSW) - See Wetlands, Locally Protected Locally Significant Wetlands (LPLSW) .

Locally Significant Wetlands - See Wetlands, Locally Significant (LSW).

Lot - Unit of land created by a Subdivision of land and intended as a unit for the purpose, whether immediate or future, of transfer of ownership and/or for development.

Lot Area - Total horizontal area within the lot lines of a lot.

Lot, Corner - Lot situated at the intersection of two streets, the interior angle of such intersection not exceeding 135 degrees.

Lot Coverage - Unless otherwise noted in a development zone, portion of a development site covered by building footprints, structures enclosed on one or more sides, parking areas, and vehicle circulation areas (including all gravel and paved surface areas).

Lot Depth - Distance from the midpoint of the front lot line to the midpoint of the rear lot line.

Lot Development Option - Land use process that applies only to individual lots and provides a means to vary the development standards normally applied in a particular zone. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.12 - Lot Development Option.

Lot, Interior - Lot with frontage on only one street.

Lot Line - Property line bounding a lot.

Lot Line Adjustment - Land use process that shifts the location(s) of lot line(s) but does not create or eliminate a unit of land, and where any reduced lots comply with the applicable zoning regulations. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development, Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments, and Section 2.14.60.

Lot Line, Front - In the case of an interior lot, a property line that abuts the public street or private street within a separate tract. In the case of a corner lot, or a lot where vehicular access is provided off an alley and there is no frontage on a public or private street, the front lot line is based on the structure's orientation and at least two of the following factors:

a. Location of the front door;

b. Location of the driveway (when accessed off a public or private street); or

c. Legal street address.

For the purposes of remodeling, rebuilding, constructing additions or accessory structures, etc., a corner lot's front lot line that was determined at the time of original construction of structure(s) on the lot may be considered valid.

Lot Line, Side - Lot boundary other than a front or rear lot line.

Lot Line, Rear - As shown below in Figure 1.6-20 - Rear Lot Line, lot line or lines most distant from and generally opposite the front lot line. In the case of an interior triangular lot or a lot with more than four sides, however, the rear lot line is a straight line 10 feet in length that:

a. Runs parallel to the front lot line or its chord; and

b. Intersects the other lot lines at points most distant from the front lot line.

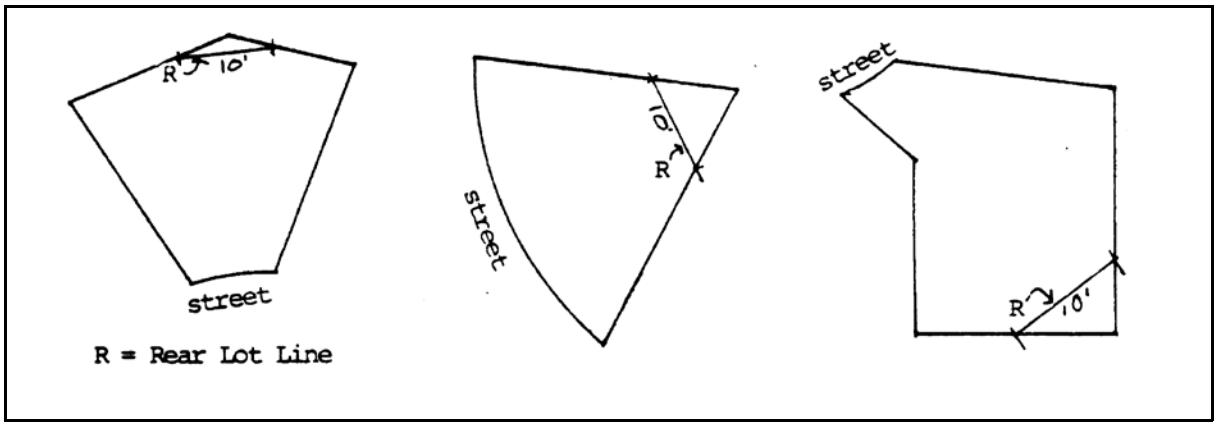


Figure 1.6-20 - Rear Lot Line

Lot of Record - Lot or parcel created through applicable Land Division regulations before adoption of this Code.

Lot, Reversed Corner - Corner lot with a rear lot line bordering the side yard of another lot, whether or not separated by an alley.

Lot, Tax - Parcel of real property shown on the County Assessor's map and identified by a tax lot number. A Tax Lot is not necessarily a Lot of Record.

Lot, Through - See Through Lot.

Lot Width - Horizontal distance between the midpoints of side lot lines.

Lowest Floor - ~~Lowest floor of the lowest enclosed area in a building, including a basement.~~ See "Lowest Floor" in Section 1.6.40. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*

Maintain - Support, keep, and continue in an existing state or condition without decline.

Manufactured Dwelling Facility - See definition under Building Types.

Manufactured Dwelling - A structure, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term Manufactured Dwelling does not include a Recreational Vehicle.~~Dwelling constructed to U.S. Department of Housing and Urban Development (HUD) standards since June 15, 1976, but not to State Building Code standards.~~ *[44 CFR 59.1, modified to replace "home" with "dwelling" to match Building Code, & Model Ordinance Section II - Definitions]*

Manufactured Dwelling Space - Portion of a Manufactured Dwelling Facility designated for occupancy of a Manufactured Dwelling or Mobile Home. Includes space for accessory structures and outdoor living areas, but excludes common areas such as roadways, guest parking, etc. See Manufactured Dwelling Facility under Building Types.

Manufactured Dwelling Stand - Portion of a Manufactured Dwelling space reserved solely for the location of a Manufactured Dwelling or mobile home structure. See Manufactured Dwelling Space.

Map Refinements - Adjustments made through professional analyses to refine the actual boundaries of some Natural Resources and Natural Hazards. Map Refinements must be made in accordance with this Code's provisions in Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, and are specifically allowed to determine the location and extent of: the 0.2-ft. Floodway; the 1.0-ft. Floodway; the Floodway Fringe (in accordance with FEMA regulations); the Top-of-bank of streams and rivers; Riparian Corridors (once Top-of-bank is accurately determined); and Wetlands (through delineations approved by the Oregon Department of State Lands).

Mean Sea Level - See "Mean Sea Level" in Section 1.6.40. *[44 CFR 59.1, modified to add new datum, & Model Ordinance Section II - Definitions]*

Minimum Assured Development Area (MADA) - Minimum area on a development site that is permitted to be disturbed for development, regardless of the Natural Resources or Natural Hazards Overlay designation(s) on the site. The methodologies for determining the MADA are listed in Chapter 4.11 - Minimum Assured Development Area (MADA).

Ministerial Decision - Nondiscretionary decision made at a City staff level using the criteria and standards of this Code.

Mitigation - Methods used to alleviate or lessen the impact of development and/or to increase or improve Natural Resource functions within Natural Resource areas.

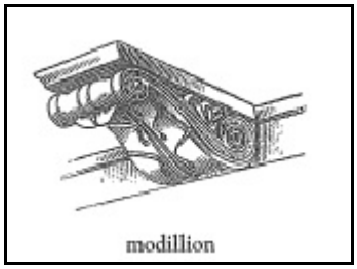


Figure 1.6-21 - Modillion

Mobile Home - Dwelling constructed for movement on public highways and constructed prior to adoption of June 15, 1976 U.S. Housing and Urban Development (HUD) standards, but meeting the requirements of Oregon's mobile home laws in effect at the time of original construction.

Mobile Home Park - See Manufactured Dwelling Facility under Building Types.

Modillion - As shown in Figure 1.6-21- Modillion, horizontal bracket or console, usually in the form of a scroll with acanthus, supporting the corona under a Cornice. Found in Corinthian, Composite, and, less frequently, Roman Iconic orders.[4]

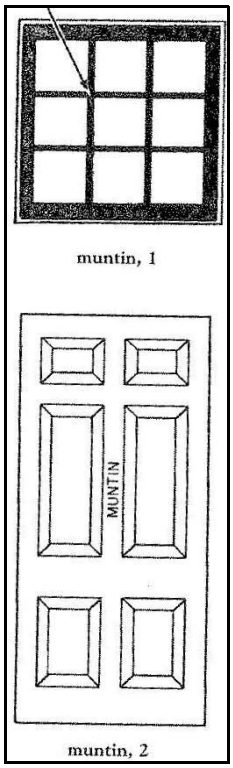


Figure 1.6-22.b Muntin

Modular Structure - Structure built off-site, but placed on a permanent foundation. Meets State Building Code standards.

Mullion - As shown in Figure 1.6-22 - Mullion, vertical member separating (and often supporting) windows, doors, or panels set in series.[5]

Muntin, Window - A secondary framing member to hold panes within a window, window wall or glazed door, as shown in Figure 1.6-22.b.[6]

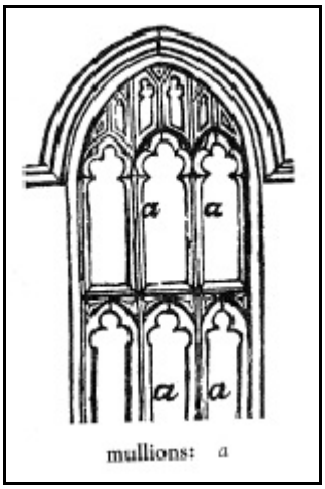


Figure 1.6-22 - Mullion

National Geodetic Vertical Datum - Elevation reference mark used in determining a flood boundary and floodway maps, formerly referred to as Mean Sea Level.

National Register of Historic Places (National Register) - Nation's official list of significant historic resources worthy of preservation, as authorized by the National Historic Preservation Act of 1966, as amended. The National Register of Historic Places is administered by the National Park Service, U.S. Department of the Interior. Historic resources may be added to the National Register of Historic Places on an individual basis and/or as part of a Historic District. Under state law, National Register of Historic Places historic resources are defined as historic resources of

[4] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

[5] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

[6] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

statewide significance. All National Register of Historic Places historic resources are defined as Designated Historic Resources in this Code.

National Register of Historic Places Historic District Classifications - Historic resources in an approved National Register of Historic Places Historic District are classified as Historic/Contributing, Historic/Noncontributing, or Nonhistoric/Noncontributing. The components of these classifications are defined as follows:

a. Historic - At least 50 years old at the time of designation and called out as Historic in the Historic District Nomination.

b. Nonhistoric - Not yet 50 years old at the time of designation or called out as Nonhistoric in the Historic District Nomination.

c. Contributing - A resource in a National Register of Historic Places Historic District which, at the time of designation, retained a sufficient amount of Historic Integrity relevant to the Period of Significance to convey its historic appearance and Historic Significance.

d. Noncontributing - A resource in a National Register of Historic Places Historic District which, at the time of designation, lacks Historic Integrity relevant to the Period of Significance, and/or which is not historic.

The City shall refer to the final approved National Register of Historic Places Historic District nomination forms to determine the appropriate classification that applies. In some cases, more than one classification may apply to a property; for example, a primary structure on a site, such as a Single-family detached home, may be classified as Historic/Contributing, while an accessory structure, such as a detached garage, may be classified as Nonhistoric/Noncontributing.

Vacant lots or parking lots shall be evaluated per the requirements for Nonhistoric/Noncontributing resources contained in this Code. Any reclassifications for these or any other Designated Historic Resources listed in a National Register of Historic Places Historic District shall be accomplished per state and federal requirements.

Natural Features Map Overlays - Comprehensive Plan and Zoning overlay designations for Natural Hazard areas and Natural Resource areas. Natural Features Map Overlays are designated on the Comprehensive Plan Map and the Official Zoning Map. The natural features are further identified on the Official Zoning Map's sub-maps entitled the Natural Hazards Map, the Significant Vegetation Map, and the Riparian Corridors and Wetlands Map.

Natural Hazards - Hazards regulated by Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions,~~.~~ and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

Natural Resources - Resources regulated by ~~Chapter 4.5 - Natural Hazard and Hillside Development Provisions,~~ Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside

Development Provisions; as well as Significant Trees and Significant Shrubs, regulated by Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting .

Natural Swale - Naturally-occurring linear depression that carries surface water only after rainfall. It also transports sub-surface water either seasonally or throughout the year.

Net Aggregate Natural Features Area - As shown in Figure 1.6-23, the area containing protected Natural Hazards, plus the area containing protected Natural Resources, minus the overlap area containing both Natural Hazards and Natural Resources so that areas are not double-counted.

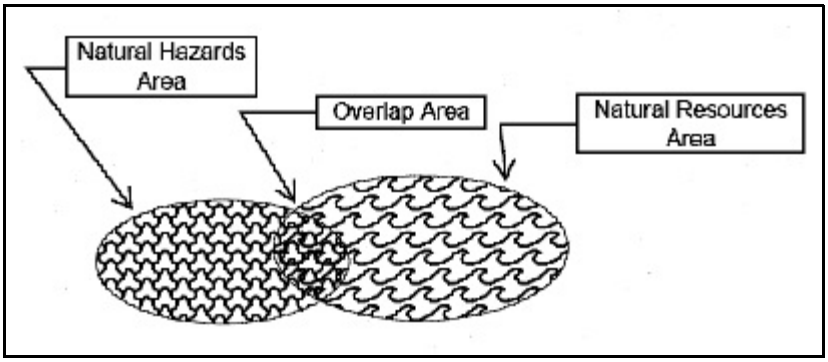


Figure 1.6-23 - Net Aggregate Natural Features Area

New Construction - See "New Construction" in Section 1.6.40. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*

Nonconforming Development - See Legal Nonconforming Development. Also pertains to an unlawful existing structure or use that does not conform to the requirements of this Code or any of its predecessors.

Nonhistoric - For historic resources not already specifically classified as part of a National Register of Historic Places Historic District (classifications for said District include Historic/Contributing, Historic/Noncontributing, and Nonhistoric/Noncontributing), the term Nonhistoric means resources that are less than 50 years old.

Non-native, Invasive, and/or Noxious Vegetation - Vegetation identified in the Oregon Department of Agriculture's Oregon Weed Policy and Classification System (Appendix 1), including weeds designated as "A," "B," and/or "T."

North American Vertical Datum of 1988 - The North American Vertical Datum of 1988 (NAVD 88) is the vertical control datum established in 1991 by the minimum-constraint adjustment of Canadian-Mexican-U.S. leveling observations. *[USGS website]*

North Campus Area - As shown in Figure 1.6-24, area generally located north of Monroe Avenue, south of Fillmore Avenue, east of Arnold Avenue, west of Eighth Street, and as particularly described in City Ordinance 92-28.

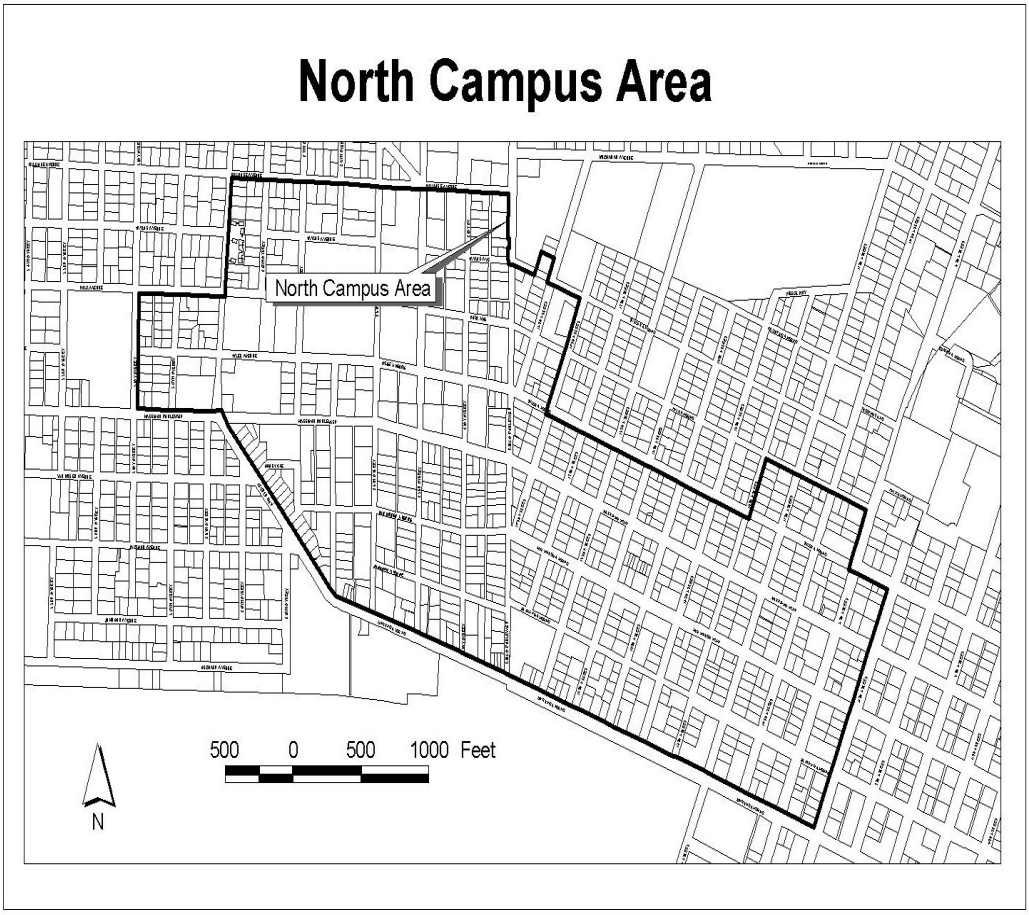


Figure 1.6-24 - North Campus Area

Notice of Disposition - Written communication that specifies the action of a Hearing Authority or Director concerning a development proposal.

NPDES – Refers to the National Pollution Discharge Elimination System, which is the permitting system established by the Environmental Protection Agency to administer the Federal Clean Water Act.

Nuisance - That which interferes with the enjoyment and use of property and is annoying, unpleasant, and/or obnoxious.

Office - Place designated for the Civic and Commercial Use Types of Administrative Services; Business Support Services; Financial, Insurance and Real Estate Services; Medical Services; and Professional and Research Services. See Chapter 3.0 - Use Classifications for definitions of these Use Types.

Open Space - Undeveloped or predominately undeveloped land, including waterways, in and around an urban area. Open Space lands are reserved for general community use, and include parks, preserves, general drainageway corridors, and other areas permanently precluded from development.

Order - Final disposition of a case which can be affirmative, negative, injunctive, or declaratory in form. Includes grant, conditional grant, or denial of an application for development.

Outdoor Space, Common - Areas intended for common outdoor active or passive recreational use. Normally includes swimming pools, recreation courts, patios, open landscaped areas, preserved natural areas, and/or greenbelts with pedestrian, equestrian, and/or bicycle trails, etc. Does not include off-street parking, loading areas, or driveways. Can be privately owned and maintained, or dedicated to the City.

Outdoor Space, Private - Areas intended for private outdoor active or passive recreational use by residents of an individual dwelling unit. Normally includes patios and landscaped areas. Does not include off-street parking, loading areas, or driveways.

Overlay - Overlay on a development zone created by ordinance in recognition of a property's or area's unique characteristics, such as Historic Resources, Natural Resources, Natural Hazards, or Willamette River Greenway; or an overlay created by ordinance to signify that a Planned Development exists or is needed. An overlay is applied over the top of a property's main zone. For example, a Planned Development applied to all or a portion of a Low Density Residential (RS-6) property would result in a PD (RS-6) Overlay . See Natural Features Map Overlays.

Parcel - Unit of land created from a Partition and intended for immediate or future transfer of ownership and/or development. See also Land, Parcel of and Lot.

Partition - See Land Division.

Patio - Inner courtyard or a space for dining or recreation, adjacent to a dwelling, that has a permanent hard surface for a floor (not gravel).

Pedestrian-friendly - Built environment or development pattern that provides direct and convenient access for handicapped persons and persons on foot (pedestrians) within a development and from a development to adjacent public transportation facilities, Such as sidewalks, bus routes, and bus shelters. A pedestrian-friendly environment also provides amenities such as window space for visual relief along sidewalks (rather than parking areas), doorways adjacent to public sidewalks for ease of access, awnings and other weather protection, benches, plazas, etc., which help to make walking an efficient and desirable method of transportation.

Perennial Stream - See Stream, Perennial.

Periodic Review - Process between the state, local governments, and others, requiring local governments to update their Comprehensive Plans and land use regulations to carry out State and local goals and objectives. Required every four to 10 years.

Period of Significance - Period of Significance is the length of time when a property was associated with important events, activities, or persons, or attained the characteristics which qualify it for National Register of Historic Places listing and/or Local Register listing. Period of Significance usually begins with the date when significant activities or events began giving the property its Historic Significance; this is often a date of construction. Period of Significance usually ends with

the date when the significant activities or events stopped giving the property its Historic Significance. For prehistoric properties, the Period of Significance is the broad span of time about which the site or district is likely to provide information; it is often the period associated with a particular cultural group.

Permeability – Ability of the soil to absorb water.

Permitted Outright - Development activity not subject to discretionary review. An example is a detached Single-family residence in an RS-3.5 Zone.

Person - Individual, corporation, governmental agency, business trust, estate, personal trust, partnership, association, two or more people having a joint or common interest, or any other legal entity.

Plan Compatibility Review - Land use process that provides an additional review of certain uses to ensure that the intensity and characteristics of the uses are compatible with particular sites and nearby land uses. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.13 - Plan Compatibility Review.

Planned Development - See Conceptual Development Plan and Detailed Development Plan.

Planned Development Modification (Major) - Land use process that provides an opportunity to allow flexibility with regard to site planning and architectural design for previously approved Conceptual or Detailed Development Plans. Such flexibility is in excess of the thresholds that define a Minor Planned Development Modification and provides benefits within the development site that compensate for requested variations from the approved Conceptual or Detailed Development Plan such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Section 2.5.60 - Planned Development Modification.

Planned Development Modification (Minor) - Land use process that provides an opportunity to allow a limited amount of flexibility with regard to site planning and architectural design for previously approved Conceptual or Detailed Development Plans; and provides benefits within the development site that compensate for requested variations from the approved Conceptual or Detailed Development Plan such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Section 2.5.60 - Planned Development Modification.

Planned Development Overlay - One of two types of overlays. One type is a zoning overlay that exists for the life of an active Conceptual or Detailed Development Plan. Procedures for this first type of Planned Development land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.5 - Planned Development. The other type is a zoning overlay established without an associated Conceptual or Detailed Development Plan. Procedures for this second type of Planned Development Overlay land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 3.32 - PD (Planned Development) Zoning Overlay.

Plat - See Final Plat.

Plat, Partition - See Final Plat, Partition.

Plat, Subdivision - See Final Plat, Subdivision.

Policy – Decision-making guideline for actions to be taken in achieving goals and the community's vision.

Practicable - Capable of being effected; feasible.

Pre-existing Condition – Phrase used in the Stormwater Master Plan (SWMP) as a reference to the land characteristics and habitat condition prior to man-made modifications.

Preservation Treatment (as applied to Designated Historic Resources) - As used in this Code, preservation treatment means activities that stabilize and maintain properties at a high level of Historic Integrity. When repair of a feature is no longer possible, preservation includes actions such as In-kind Repair and Replacement and often allows review through a Ministerial process.

Preserve – To save from change or loss and reserve for a special purpose. The most strict non-degradation standard.

Pretreatment – Treatment of urban runoff prior to discharging into a public water body.

Primary Source Material - Pertains to Designated Historic Resources. Primary source material includes historic photographs, design drawings or blueprints, or other information directly associated with a specific historic resource.

Primary Use - Main, principal, or predominant use.

Principal Use - See Primary Use.

Properly Functioning Condition (PFC) – National Marine Fisheries Service defines PFC as the sustained presence of natural habitat-forming processes that are necessary for the long-term survival of a species through the full range of environmental conditions.

Protect – To save or shield from loss, destruction, or injury or to save for future intended use.

Proximate Wetlands - See Wetlands, Proximate.

Quasi-judicial Decision - Similar to a court proceeding in which affected parties are afforded procedural safeguards. The quasi-judicial process is characteristic of most meetings of the Planning Commission and Land Development Hearings Board. Personal notice must be mailed to property owners and occupants living within a prescribed distance from the affected area. Unlike legislative cases, the Planning Commissioners or Land Development Hearings Board members are expected to avoid outside discussion of the business at hand and must declare *ex parte* contacts. See also Legislative Decision.

Recreational Vehicle - A vehicle that is ~~which includes all the following characteristics~~:

- B~~b~~uilt on a single chassis;

- 400 sq. ft. or less when measured at the largest horizontal projection;

- D~~d~~esigned to be self-propelled or permanently towed ~~towable~~ by a light duty truck; and

- D~~d~~esigned primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use ~~as opposed to a permanent dwelling~~. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Redevelopment – Restoring or replacing existing buildings. See also Infill.

Rehabilitation Treatment (as applied to Designated Historic Resources) - As used in this Code, Rehabilitation Treatment includes activities that modify properties. Though removal of Historically Significant features is discouraged, replacement with new materials and even new additions may be allowed, if they are compatible with the property's historic materials, features, size, scale and proportion, and massing to protect the Historic Integrity of the property and its environment. Approval generally requires quasi-judicial review by the Historic Resources Commission.

Replat (Major) - Land use process that is used when parcels within a recorded Subdivision are reconfigured such that four or more parcels are created or deleted in a calendar year. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 2.4 - Subdivisions and Major Replats, and Section 2.4.50 - Major Replat.

Replat (Minor) - Land use process that is used when parcels within a recorded Subdivision or Partition are reconfigured such that three or fewer parcels are created or deleted in a calendar year. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development, Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments, and Section 2.14.50.

Reserve Strip - Strip of land dedicated to the City and reserved for use as part of a future public street or facility.

Residential Care - Services such as supervision; protection; assistance while bathing, dressing, grooming, or eating; management of money; transportation; recreation; and the provision of room and board.

Residential Care Facility - Facility licensed by the state to accommodate more than five and fewer than 15 mentally or physically handicapped, elderly, or drug- or alcohol-dependent persons. Does not include resident staff persons engaged in their care.

Restoration – Process of returning an area to a close approximation of a former condition, and re-establishing functions.

Reversible - Pertains to Designated Historic Resources. Refers to modifications that do not substantially change, obscure, damage, or destroy character-defining materials, features, or finishes. Intent is that the modification could be removed and any impacted character-defining materials, features, or finishes could then be restored.

Right-of-Way - Public travel route dedicated for vehicular, bicycle, or pedestrian use. Can and often does contain public and franchise utilities.

Riparian Area or Riparian Corridor - Land adjacent to a water body that directly affects or is affected by the aquatic environment. This includes Streams, rivers, and lakes and their side channels, Floodplains, and Wetlands, and portions of adjacent slopes that shade the channel or provide streamside habitat. The area of transition from an aquatic ecosystem to a terrestrial system.

Riparian Assessment Area - Bounded area inventoried for the Riparian Assessment portion of the Natural Features Inventory.

Riparian Corridor - See Riparian Area.

Riparian Management Zone - Area within the Willamette River Greenway, extending from the edge of the waterway to either the Top-of-bank or to the 10-year Floodplain, whichever is greater.

Riparian Corridors, Regulated - Riparian and associated upland areas regulated by Chapter 4.13 - Riparian Corridor and Wetland Provisions to protect Riparian Areas and water resources. Regulated Riparian Corridors are clearly defined on the Comprehensive Plan Map, Official Zoning Map, and Riparian Corridors and Wetlands Map. Regulated Riparian Corridors have been identified for both Intermittent and Perennial Streams and widths are measured from Top-of-bank and based on areas drained. See Top-of-bank and Upland Natural Resources.

Riparian Function - A characteristic action or role provided by riparian areas, such as water quality, flood management, thermal regulation, and wildlife habitat.

Riparian Vegetation - For the purposes of these regulations, vegetation located within the Regulated Riparian Corridor.

Sash, Window - Any framework of a window; may be movable or fixed; may slide in a vertical plane (such as a double-hung window) or may be pivoted (such as a casement window). For the purposes of this definition, a window sash also includes the top and bottom rails and stiles as shown in Figure 1.6-24.b.[7]

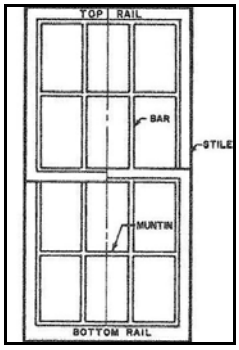


Figure 1.6-24.b - Sash

Secondary Source Material - Pertains to Designated Historic Resources. Secondary Source Material includes information such as photos, design drawings, or other information depicting structures or appurtenances similar to and/or from the same Period of Significance as the Designated Historic Resource for which a Historic Preservation Permit is being requested.

Setback - Minimum allowable horizontal distance from a property line (unless otherwise noted) to the nearest vertical wall of a building or structure, fence, or other element as defined by this Code.

[7] Harris, Cyril M. "Dictionary of Architecture and Construction, Fourth Edition" 2006

Shall – Expressing what is mandatory.

Shallow Flooding, Area of - See "Area of Shallow Flooding" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Should – Expressing what is desired, but not mandatory.

Sign - Device or medium affixed to property (including the device or medium's structure, lighting, materials, and component parts) which by reason of its form, color, wording, symbol, design, and illumination, visually communicates, identifies, advertises, informs, announces, or attracts attention to the subject thereof.

Sign, Area - As shown in Figure 1.6-25 - Sign Area, square footage of a sign face within a single continuous rectilinear perimeter that encloses the extreme limits of a sign. Excludes the pole or base of free-standing signs. Where a sign is more than one ft. thick, has more than two faces, or is three dimensional, the Sign Area calculation is based on 50 percent of the surface area of the four vertical faces of the smallest rectangular solid that can be formed around the sign.

The area of a sign on an awning, where the awning projects more than six ft. from the building face over a walkway to provide weather protection, is determined using the smallest rectangle around the graphic on the awning. A sign on an awning that projects less than six ft. shall be considered a three-dimensional sign.

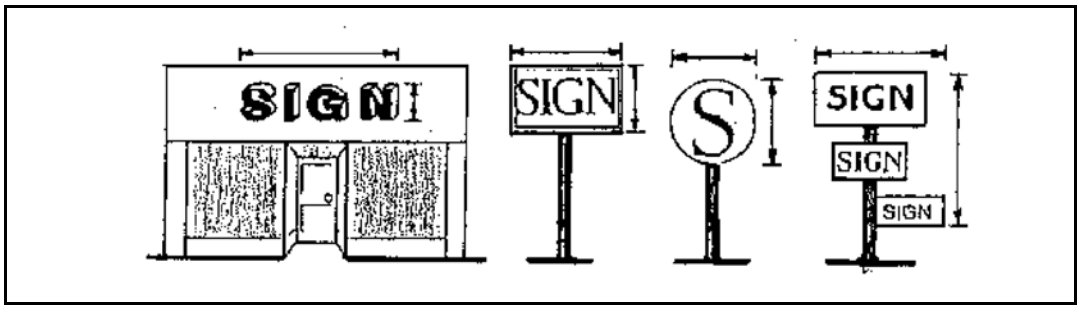


Figure 1.6-25 - Sign Area

Sign, Attached - Sign attached to the primary building on the subject property. Includes wall, projecting, fin, parapet, marquee, and awning signs.

Sign, Blade - Narrow sign extending perpendicular to a building over a sidewalk.

Sign Clearance - Height measured from the highest grade directly beneath the sign to the bottom of the sign structure enclosing the sign face.

Sign, Detached - Structurally self-supporting sign not attached to a building, including pole, ground, and monument signs.

Sign Frontage, Primary - Length of the property line parallel to and along the street right-of-way adjacent to a property. On Through Lots, primary frontage corresponds to the legal street address, auto entrance, building entrance, or front yard of the property.

Sign Frontage, Secondary - Face of a building oriented toward an on-site parking lot, private roadway, or public alley.

Sign Height - As shown in Figure 1.6-26 - Sign Height, height as measured from the lowest grade directly beneath the sign to the top of the sign structure enclosing the sign face.

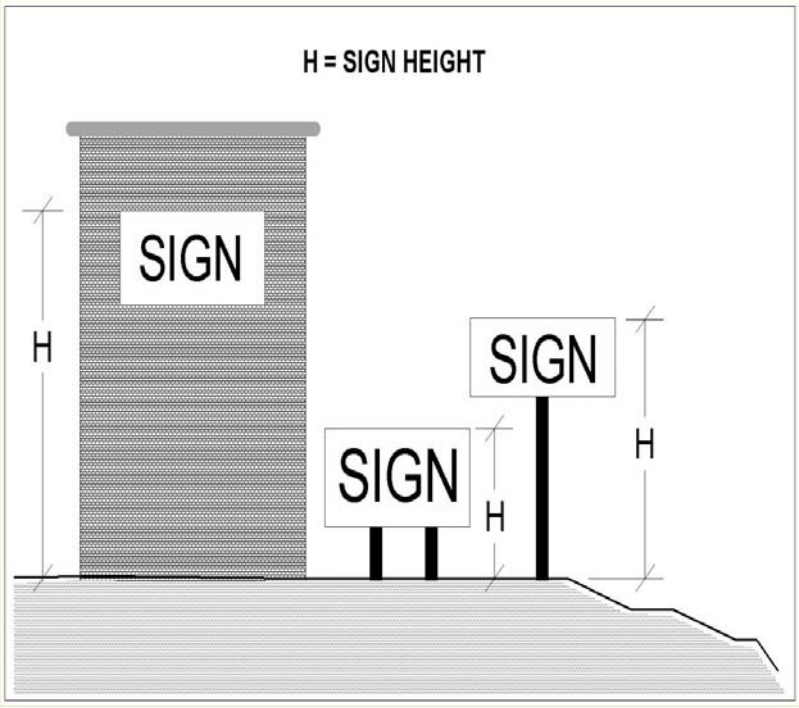


Figure 1.6-26 - Sign Height

Sign, Permanent - Sign permanently affixed or attached to a building, structure, or to the ground.

Sign, Temporary - Sign temporarily affixed or attached to a building, structure, or to the ground, and/or intended to be displayed for a limited time.

Sign, Variable Message - Sign which utilizes manual, mechanical, electro-mechanical, electronic, radio-frequency, fiberoptic, or other automated means of changing the sign message or copy at timed intervals. Includes LED, incandescent luminaries, electronic message centers, and video display boards.

Sign Variance - Land use process to request a deviation from the provisions of Chapter 4.7 - Sign Regulations. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Section 4.7.110.

Significant – Feature that has been specifically identified as worthy of special recognition or protection such as a Significant Wetland, etc., or a resource that has been formally identified by the City through adopted plans and ordinances.

Significant Natural Features - See Natural Hazards and Natural Resources.

Significant Shrub - Excluding Non-native, Invasive, and/or Noxious Vegetation, a Significant Shrub is a living, standing plant that is either:

a. Required to be preserved through the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; or

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b. Over four ft. in height and located outside any area inventoried by the Natural Features Inventory.

Significant Tree - Excluding Non-native, Invasive, and/or Noxious Vegetation, a Significant Tree is a living, standing woody plant that is either:

a. Required to be preserved through the provisions of Chapter 2.11 - Floodplain Development Permit, Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~and/or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and/or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions; or

b. Located outside any area inventoried by the Natural Features Inventory and of a trunk size that is eight in. or greater in caliper at four ft. above existing grade.

Significant Vegetation - Vegetation identified and assessed in the Natural Features Inventory and determined to be significant through the Natural Features Project. Significant Vegetation is clearly identified on the Significant Vegetation Map and through the provisions of Chapter 4.12 - Significant Vegetation Protection Provisions.

Significant Vegetation Management Plan - Plan required by Chapter 4.12 - Significant Vegetation Protection Provisions prior to the removal of any vegetation governed by the provisions of Chapter 4.12, and required either prior to or as part of a land use application, building permit application, or construction permit application, whichever comes first.

Slope - As shown in Figure 1.6-27 - Slope, the deviation of a surface from the horizontal, usually expressed in percent or degrees. See also Grade.

Soil Bioengineering - Method of soil or land stabilization that uses living plant material selected for the specific site situation as the major structural or engineering component of the stabilization.

Solar Access - Line-of-sight path to the sun during hours that provide beneficial use of solar energy.

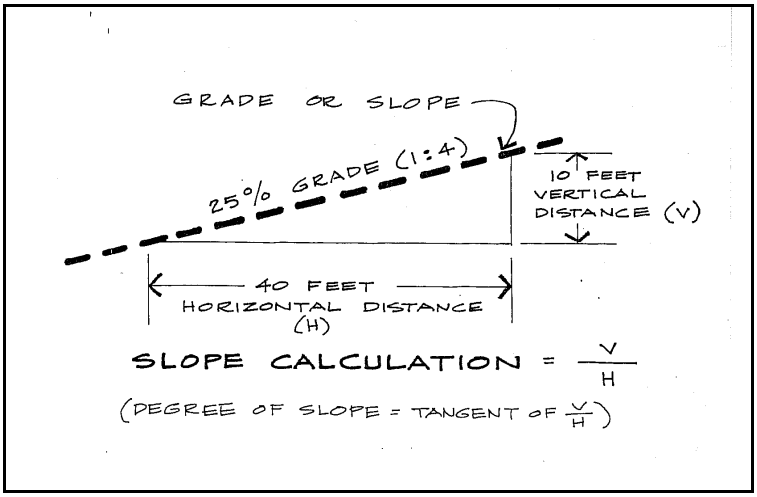

Figure 1.6-27 - Slope

Solar Access Easement - Private agreement between property owners that protects Solar Access. Solar Easements are prepared and recorded pursuant to ORS 105.880-105.895, as amended.

Solar-access-friendly Trees - Trees with minimal effect on Solar Access during winter months because of their leafing and branching characteristics; deciduous trees.

Solar Access Permit (Type 1) - Land use process that provides and protects Solar Access for use of a property owner(s) by limiting shading of a solar collector by trees on adjacent properties. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.18 - Solar Access Permits.

Solar Access Permit (Type 2) - Land use process that provides and protects Solar Access for use of a property owner(s) by limiting shading of a solar collector by structures on adjacent properties. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Chapter 2.18 - Solar Access Permits.

Solar Access Protection - Right to unobstructed Solar Access for at least four hours between 9 a.m. and 3 p.m. on November 21 of each year.

Solar Building Line - Southern-most place that the south wall of a house can be located and still receive shade protection from buildings located off-site to the south.

Solar Collector - Heating or cooling system in which the thermal energy of solar radiation is captured and stored for later release.

Solar Energy System - Set of devices used to collect solar energy and convert and store it for purposes including heating and cooling of buildings or for the production of power.

a. **Active** - Solar energy system that uses a separate collector to transform solar radiation into usable heat and a mechanical system to transfer heat to its point of use.

b. **Passive** - Solar energy system that uses natural and architectural components to collect and store solar energy using minimal or no external mechanical equipment.

Solar Envelope - Drawing or representation by contour lines of a three-dimensional space over a lot or development site representing the allowable height of structures and vegetation that provides Solar Access protection for neighboring lots.

Solar South - Thirty degrees east to 30 degrees west of true south. In Corvallis, true south is 20 degrees east of magnetic south.

Special Development Decision - Development decision that requires considerable discretion in applying criteria and standards of this Code. Involves a public hearing in accordance with the provisions in Chapter 2.0 - Public Hearings, as well as approval by an established Hearing Authority.

Special Flood Hazard Area - See "Special Flood Hazard Area" in Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

Special Occupancy Structure - See "Special Occupancy Structure" in Section 1.6.40. *[ORS 455.447 & Model Ordinance Section II - Definitions]*

Special Zone - Zone created by ordinance in recognition of an area's unique characteristics such as environmental or historic resources, Natural Resources, Natural Hazards, or an identified need for redevelopment.

Specification Standards - Measurable standards applicable to development. These standards contain the minimum requirements for design and construction of improvements covered by this Code.

Staff - Administrative officers responsible for the operation and management of the City's departments and divisions.

Start of Construction - See "Start of Construction" in Section 1.6.40. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

State Historic Preservation Office (SHPO) - Agency of state government delegated the authority from the federal government to administer a state's historic preservation program consistent with state and federal law.

Stormwater – Rainfall or snow melt that drains into streams or pipes.

Stormwater Functions – Includes interception and temporary storage of precipitation, natural surface conveyance, stream subsurface flow, infiltration, ground water recharge, sediment and pollutant filtration, cooling, sustaining aquatic habitats, cleansing, nutrient transfer, and other beneficial functions.

Stormwater Phase II Rules – Federal Clean Water Act regulations that deal with runoff water quality issues, including pollutants and construction sediments.

Stream - A channel such as a river or creek that carries flowing surface water, including Perennial Streams and Intermittent Streams with defined channels, and excluding man-made irrigation and drainage channels.

Stream Corridor – Corridor of land of variable width along each side of a stream channel that is primarily reserved for stormwater-related and other stream system functions and processes.

Stream Corridor Functions – Attributes (uses and processes) that are connected with a Stream Corridor. These include ecological functions like pollutant filtering, shading the channel, floodwater management, supplying food for fish (insects, leaves, etc.) and other aquatic life, providing space for channel movement, and providing large wood to the channel when trees die.

Stream, Ephemeral - Stream that has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Ground water is not a source of water for Ephemeral Streams.

Stream, Intermittent - Stream that flows primarily during the wet seasons when the water table is high, and remains dry for a portion of the year. Most Intermittent Streams flow for a good portion of the year (DSL -- ORS 196.800, as amended). Typically, when Intermittent Streams lack surface flow, they continue to have ground water flow through gravels below the surface. Intermittent

Streams in Corvallis, defined through the Natural Features Scoping Project, are further defined as natural drainageways that:

a. Do not have year-round flows in a water year (October 1 through September 30) based on a precipitation total at the time of determination that is within 20 percent of average total precipitation for the past 30 years; and

b. Drain at least 20 acres.

Upon field verification, an Intermittent Stream may be defined to include a distinct channel upstream from the 20-acre drainage basin, provided that Riparian Vegetation is present.

Stream, **Perennial** - Stream that has flowing water year-round during a typical year. The water table is located above the streambed for most of the year. Ground water is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow. Perennial Streams in Corvallis, defined through the Natural Features Scoping Project, are further defined as natural drainageways that include all stream segments inventoried through the City of Corvallis Endangered Species Act 2001 Inventory and other drainageways that:

a. Have year-round flows in a water year (October 1 through September 30) based on a precipitation total at the time of determination that is within 20 percent of average total precipitation for the past 30 years; and

b. Drain at least 20 acres.

Stream System – Channel, subsurface flow, and adjacent corridor, including the floodplain.

Streets - Designated in the City of Corvallis Transportation Plan as outlined in "a," through "h," below. See also Chapter 4.0 - Improvements Required with Development.

a. **Arterial Highways** - These consist of state highways, which are the primary gateways into Corvallis and carry nearly all vehicles entering, leaving, or passing through the Corvallis area. The ORE 34/US 20 corridor is designated a Statewide Highway on the National Highway System (NHS) and is a key corridor between I-5 and the Oregon coast.

b. **Arterial Streets** - These connect the state highways, linking major commercial, residential, industrial, and institutional areas. Arterial Streets are critical to the Corvallis street network because they generally serve the highest traffic volumes and longest trips. Access control is critical on these facilities to ensure safe and efficient operation.

c. **Collector Streets** - These provide both access and circulation within residential neighborhoods and commercial/industrial areas. Collector Streets differ from Arterial Streets in two ways:

1. Controlled access may not be required for all Collector Streets; and

2. Collector Streets penetrate neighborhoods, distributing vehicles from the Arterial Streets through the area to their ultimate destinations.

The standard Collector Street is characterized by a range of uses that typically result in a greater intensity of development along its route or at major intersections with other Collector Streets or Arterial Streets.

d. **Neighborhood Collector Streets** - These minimize the impact of traffic to adjacent land uses and provide necessary access to residential areas. Neighborhood Collector Streets are similar to standard Collector Streets in that controlled access is unnecessary and that they penetrate neighborhoods, distributing vehicles from the Arterial Streets through the area to their ultimate destinations. In the case of a Neighborhood Collector Street, however, land use along its route is generally Low to Medium Density Residential. The intensity of development at intersections along its route is also generally less intense than might occur for standard Collector Streets. Traffic calming devices, if used, can be constructed at the time of development.

e. **Cul-de-Sac** - Local Street with one outlet and a turnaround. Because emphasis should be placed on the creation of a roughly rectilinear street pattern that encourages the dispersion of local traffic through a number of streets, the use of Cul-de-sacs should be minimized. See Comprehensive Plan Policy 11.3.8.

f. **Local Streets** - These provide access to immediately adjacent land. Although through-traffic movement on new Local Streets usually is deliberately discouraged, this may not be practical for particular neighborhoods. Local Connector or Local Street designations shall be applied to newly developing areas based on review of a street network plan and, in some cases, a traffic study provided with the development application. These designations are based on a number of factors, including density of development, anticipated traffic volumes, and the potential for through traffic. Street network plans must provide for connectivity within the transportation system to the extent that, generally, both Local Connector and Local Streets shall be created within a development. Traffic calming devices can be constructed at the time of development.

g. **Local Connector Streets** - These provide some through-traffic functions within a particular development and access from Local Streets to Arterial, Collector, Neighborhood Collector, or other Local Streets. Local Connector Streets are generally the means by which traffic accesses the community Arterial-Collector Street system.

h. **Shopping Streets** - These are located within Neighborhood Centers and may include Local, Local Connector, Neighborhood Collector, and/or Collector Streets. Access control and traffic calming along Shopping Streets shall be typical; sidewalks shall be wider to enhance special pedestrian accessibility and shopping opportunities; and planting strips shall be reduced or eliminated, provided that tree wells and other vegetation amenities, such as permanent on-ground or hanging planters, are furnished and maintained.

Structure - Combination of materials to form a construction for use, occupancy, or ornamentation whether installed on, above, or below the surface of land or water. For the definition of Structure as applied to the 100-year Floodplain regulations contained in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, see Section 1.6.40. *[44 CFR 59.1, modified for clarify, & Model Ordinance Section II - Definitions]*

Structure Height - See Height of Buildings.

Subdivision - See Land Division.

Substantial Damage - Damage to structures within the 100-year Floodplain~~, damage to Nonconforming Structures,~~ and/or damage to structures containing Nonconforming Uses, as defined below:

a. **Substantial Damage to Structures within the 100-Year Floodplain** - For the definition of Substantial Damage as applied to the 100-year Floodplain regulations contained in Chapter 2.11 - Floodplain Development Permit and Chapter 4.5 - Floodplain Provisions, see Section 1.6.40.~~Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed 50 percent of the structure's market value before the damage occurred. Substantial Damage also pertains to flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the structure's market value before the damage occurred. Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, substantial improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft.-Floodway.~~ *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

b. **Substantial Damage to Structures Containing Nonconforming Uses** - Damage of any origin sustained by a structure containing a Nonconforming Use, to an extent exceeding ~~60~~ 50 percent of the structure's market value before the damage occurred.

Substantial Improvement - ~~Any~~ R~~r~~ehabilitation, repair, reconstruction, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the structure's market value before the S~~s~~tart of C~~c~~onstruction of the improvement. This term includes structures which have incurred Substantial Damage, regardless of the actual repair work performed. The market value of the structure is:

a. The appraised real market value of the structure prior to the start of the initial repair or improvement; or

b. In the case of damage, the appraised real market value of the structure prior to the damage occurring. The term does not include either:~~Substantial Improvement exempts the following:~~

~~(a)~~1. A project for ~~Any~~ improvement ~~to~~ of a structure ~~that would make it comply with~~ to correct existing violations of state or local health, sanitary, or safety ~~regulations~~ code specifications, which have been identified by the local code enforcement official and which are the minimum necessary to ensure ~~assure~~ safe living conditions; or

~~(b)~~2. ~~Any a~~Alteration of an Historic S~~s~~tructure, ~~listed on the National Register of Historic Places.~~ , provided that the alteration will not preclude the structure's continued designation as an Historic Structure. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

~~Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, substantial improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft. Floodway.~~

Sunchart - Photograph showing the sun's positions during different hours and seasons of the year and any trees, buildings, or topographies that obstruct Solar Access. The Sunchart shall include as coordinates the solar altitude in 10-degree or smaller increments and solar azimuth in 15-degree or smaller increments.

Sustainable - Able to be maintained or continued indefinitely.

Tentative Subdivision Plat - See "b" under Land Division.

Tentative Subdivision Plat Modification - Land use process that provides an opportunity to allow a limited amount of flexibility with regard to site planning for a previously approved Subdivision; and provides elements within the development site that compensate for requested variations from the approved Tentative Subdivision Plat such that the intent of the original approval is still met. Procedures for this type of land use application are outlined in Section 1.2.110.02 - General Development and Section 2.4.80 - Tentative Subdivision Plat Modification.

Through Lot - Lot that fronts two parallel streets or that fronts two streets that do not intersect at the lot's boundaries.

Through Lot Easement - Landscape easement adjacent to a street and adjacent to or part of a Through Lot. Contains landscape screening.

Timber Harvest, Commercial - Cutting, removing, severing from the land, trees for wood production and/or for sale. Commercial Timber Harvesting may be regulated by the Oregon Forest Practices Act. Christmas tree farming is not a form of Commercial Timber Harvesting. It is an agricultural land use.

Timber Harvest, Noncommercial - Cutting, removing, severing from the land, trees for personal use such as fire wood, and/or clearance to create development areas. Wood is not sold to another party, and activities are generally not regulated by the Oregon Forest Practices Act.

Top-of-bank - Bankfull stage of a Stream or river which is the stage or elevation at which water overflows the natural banks of Streams or other waters of this state and begins to inundate the upland. In the absence of physical evidence, the two-year recurrence interval flood elevation may be used to approximate the bankfull stage or delineate the Top-of-bank.

Traffic Calming - Use of devices to slow traffic speeds. Devices include bulbed intersections, speed humps, raised planted medians, mid-block curb extensions, traffic circles, signage, and varied paving materials. Traffic Calming is addressed in the Transportation Plan and may be used on Neighborhood Collector and Local Streets.

Tree Canopy - A view which is dominated by the appearance of trees. As used in the Comprehensive Plan, Tree Canopy refers to those hillside areas where trees are the major visual feature when viewed from a horizontal plane or from lower elevations.

Tree Canopy Coverage - The percentage of a lot, parcel, tract, development site, and/or common area that is within the drip line of trees as measured on a horizontal plane.

a. **Mature Tree Canopy Coverage** - The area that is expected to be within the drip line at the anticipated time of maturity of the tree by species.

b. **Fifteen-year Mature Tree Canopy Coverage** - The area that is expected to be within the drip line at year fifteen from the date of planting based upon a planting of one- or 1.5-in. caliper trees and based upon the specific tree by species.

Tree Grove - A group of trees that are predominantly 25 ft. or more in height and have continuous canopy cover of 0.5 acre or more and are identified in the Natural Features Inventory.

Tree Grove, Isolated - Tree Groves that are not located within other resource areas.

Tree Grove, Mitigation - Tree Groves required to be planted or retained as mitigation for development.

Tree, Hazardous - Trees which are determined by a certified arborist and/or the City Urban Forester to be of immediate health, safety, or welfare threat to persons or property. Immediate health, safety, or welfare threat includes damage to persons or property from tree collapse or limb breakage that is imminent or expected during average annual winter storm events. Hazardous Trees include trees that are cracked, split, leaning, or physically damaged to the degree that they are likely to fail and injure persons or property. Hazardous Trees also include trees that are sufficiently diseased, damaged, and/or decayed that treatment to restore their health is not warranted, and that without reasonable treatment and pruning, the disease is likely to spread to adjacent trees and cause such adjacent trees to become diseased or hazardous.

Tree, Large Canopy - Trees that, at maturity, are expected to have a Tree Canopy Coverage of 30 ft. or more in diameter.

Tree, Medium Canopy - Trees that, at maturity, are expected to have a Tree Canopy Coverage of less than 30 ft. in diameter.

Undeveloped Land in the 100-year Floodplain - Either: (1) land that does not contain a primary structure; or (2) in cases where land does contain a primary structure, then land that can be divided and the resulting vacant parcels can be developed per this Code.

Unwanted Species – Species that are either nonnative or that do not contribute to the Properly Functioning Condition of an adjacent stream.

Upland Natural Resources – Natural Resources, NaturalHazards, and areas outside of the Stream Corridor and the 100-year Floodplain that influence stormwater function and management. They include uplands, Wetlands, vegetation, swales, and ground water zones.

Urban Fringe – Area within the Urban Growth Boundary and outside the City limits.

Urban Growth Boundary – Line that circumscribes the Urban Fringe and the City Limits and that is intended by state and local regulations to contain the area available to urban development.

Urban Stream – Seasonally or perennially surface-flowing Watercourse presently with a defined channel, including Watercourses in either a native or altered form.

Use - Purpose of or activity on a site.

Use Type - Classification of a Use or Uses on the basis of common functional, product, or compatibility characteristics, thereby regulating Uses in accordance with criteria directly relevant to the public interest. See Chapter 3.0 - Use Classifications for definitions of specific Use Types.

Vacate - Release of interest in a piece of property.

Vacating of Public Lands and Plats - Land use process that petitions to vacate all or parts of a public street, alley, easement, plat, or other public place if determined not to be harmful to the City or adjacent properties. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development and Chapter 2.8 - Vacating of Public Lands and Plats.

Vegetation Cover Types, ARA - ARA habitat classes in the Natural Features Inventory. The Vegetation Cover Types, or ARA habitat classes, are as shown below in Table 1.6-1 - Vegetation Cover Types.

Table 1.6-1 - ARA Vegetation Cover Types	
6. Conifer > 70% closed canopy	15. Seasonally inundated shrub wet valley
7. Mixed Forest > 70% closed canopy	20. Grass short (lawn, pasture)
8. Hardwood > 70% closed canopy	21. Grass natural/dry prairie
9. Conifer woodland 30-70% closed canopy	22. Grass tall (ryegrass, meadow)
10. Mixed woodland 30-70% closed canopy	23. Bare soil/rock/burnt
11. Hardwood woodland 30-70% closed canopy	26. Emergent/herb wetland or pond (seasonal)
12. Open (30% canopy) non-oak woods	27. Emergent wetland or pond (water year-round)
13. Oak savanna (30% canopy)	30. Developed
14. Shrub dry, tree open	

Vegetation Sub-polygon - A subarea within a wildlife habitat area containing a single Vegetation Cover Type such as conifer woodland or oak savanna. See the wildlife habitat assessment portion of the Natural Features Inventory for the definition of wildlife habitat area.

Vertical Addition - The addition of a room or rooms on top of an existing building. *[Model Ordinance Section II - Definitions]*

Visible from Public Rights-of-way (Excluding Alleys) and Private Street Rights-of-way - As indicated by the arrows in Figure 1.6-28 - Visibility from Streets, structures and appurtenances that face public rights-of-way (excluding alleys) and private street rights-of-way are considered visible unless screened consistent with "a," or "b," below. In all cases the screen shall be of an equal or greater height and width as the structure being screened.

The structure or appurtenance shall be screened by:

a. A solid structure; or

b. A hedge or fence with a minimum opacity of 80%.

Vision Clearance Area - Specific distances and prohibitions on visual obstructions within Vision Clearance Areas are determined by the City Engineer.

Visual Obstruction - Fence, hedge, tree, shrub, device, wall, or structure between the elevations of two ft. and eight ft. above the adjacent curb height or above the elevation of the gutter line of a street edge where there is no curb, as determined by the City Engineer, and so located at a street, driveway, or alley intersection as to limit the visibility of pedestrians or persons in motor vehicles.

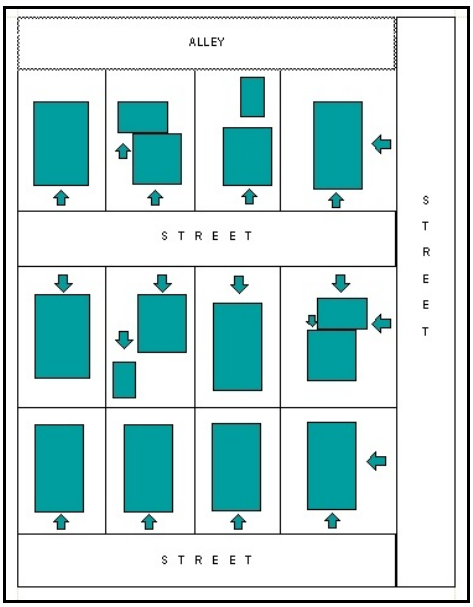

Figure 1.6-28 - Visibility from Streets

Watercourse - Any natural or artificial Stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine, or wash in which water:

a. Flows in a definite direction or course, either continuously or intermittently;

b. Has a definite channel, bed, and banks; and

c. Includes an area adjacent thereto subject to inundation by reason of overflow or floodwater.

Water-dependent - Use or activity that can be carried out only on, in, or adjacent to water areas because the Use requires access to the water source or to the water body for water-borne transportation, recreation, or energy production.

Water-related - Use not directly dependent upon access to a water body, but that provides goods or services directly associated with Water-dependent land or waterway use and that, if not located adjacent to water, would result in a public loss of quality in the goods or services offered. Residences, parking lots, spoil and dump sites, roads and highways, restaurants, businesses, factories, and Manufactured Dwelling Facilities are not generally considered Water-dependent or Water-related.

Water Service Levels - The Corvallis Urban Growth Boundary is divided into four Water Service Levels based on elevation and associated water pressure in each area. These elevation ranges are:

a. 1st level = 210 ft. to 290 ft.;

b. 2nd level = 290 ft. to 410 ft.;

c. 3rd level = 410 ft. to 560 ft.; and

d. 4th level = above 560 ft.

The 4th Water Service Level is not served by City water.

Watershed – Drainage area of a specific stream system. Small Watersheds are components of larger Watersheds.

Water Surface Elevation - The height, in relation to a specific Datum, of floods of various magnitudes and frequencies in the Floodplains of coastal or riverine areas. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

Wetlands - Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands are generally characterized by one of three parameters; certain soil types, aquatic plants, and hydrology.

Wetland Assessment - Determining the relative quality of a Wetland by assessing its functions and conditions. The methodology generally used to determine the relative quality of Wetlands for purposes of a Local Wetlands Inventory (LWI) is the Oregon Freshwater Wetland Assessment Methodology (Roth, et.al. 1996).

Wetland Delineation - Process of determining the boundary between a Wetland and an uplands. Delineations must be carried out following the guidelines of the U.S. Army Corps of Engineers and the Oregon Department of State Lands. A Wetland Delineation locates the boundary between the Wetland and upland, based on the field indicators of vegetation, soils, and hydrology.

Wetland Function - A characteristic action or behavior associated with a Wetland that contributes to a larger ecological condition such as wildlife habitat, water quality, and/or flood control.

Wetland Hydrology - Permanent or periodic inundation or prolonged soil saturation sufficient to create anaerobic conditions in the upper soil profile.

Wetlands, Jurisdictional - Wetlands regulated by the state and/or federal government.

Wetlands, Local Wetlands Inventory (LWI) - An inventory of all Wetlands greater than 0.5 acre within a jurisdiction using the standards and procedures of OAR 141-86-110 through 141-86-240, as amended over time. Local Wetlands Inventory information and mapping are intended for planning purposes only. Mapped Wetland boundaries are accurate to within 25 ft. However, there may be unmapped Wetlands that are subject to state and federal regulation. In all cases, actual field conditions determine specific Wetland boundaries.

Wetlands, Locally Protected Locally Significant Wetlands (LPLSW) - Locally Significant Wetlands that are protected through local government regulations, in addition to any state or federal regulations.

Wetlands, Locally Significant Wetlands (LSW) - Wetlands determined to be locally significant in compliance with Oregon Administrative Rules (OARs), which meet the Oregon Freshwater Assessment Methodology criteria for Locally Significant Wetlands; and which have been adopted in the Local Wetlands Inventory as being locally significant. Locally Significant Wetlands are identified on the Locally Significant Wetlands Map.

Wetlands, Proximate - Jurisdictional Wetlands within or adjacent to a Riparian Corridor that are not limited to Locally Significant Wetlands. These Proximate Wetlands enhance Riparian Function and receive protection as part of a Riparian-related area.

Wetlands Regulations - Regulations pertaining to Wetlands in the State or Oregon, including:

a. State of Oregon Department of State Lands regulations from the Removal-Fill Law outlined in ORS 196.800-196.990, as amended over time;

b. U.S. Army Corps of Engineers through Section 404 of the Clean Water Act, as amended over time; and

c. City of Corvallis regulations as amended over time and pertaining to:

1. Locally Protected Locally Significant Wetlands;

2. Wetlands located in Riparian Corridors, with respect to the Wetlands' Riparian Function and Floodplain Functions; and

3. Wetlands located in the 100-year Floodplain, with respect to the Wetlands' Riparian Function and Floodplain Functions.

Willamette River Greenway Conditional Development - Land use process that is a type of Conditional Development required for development within lands subject to a Willamette River Greenway (WRG) Zoning Overlay, when the development is not considered Exempt per the provisions of Section 3.30.30 - Exemptions. Procedures for this type of land use application are outlined in Section 1.2.110.03 - Special Development, Chapter 3.30 - WRG (Willamette River Greenway) Zoning Overlay, and Chapter 2.3 - Conditional Development.

Yard - Open space unobstructed from the ground upward except as otherwise provided in this Code. In the case of a corner lot, the front, rear, and side yards that were determined at the time of original construction of structure(s) on the lot may be used for the purposes of remodeling, rebuilding, and/or constructing additions, accessory structures, etc.

Yard, Exterior Side - As shown in Figure 1.6-29 - Exterior Side Yard below, the yard extending from the front yard to the rear lot line on the street side of a corner lot.

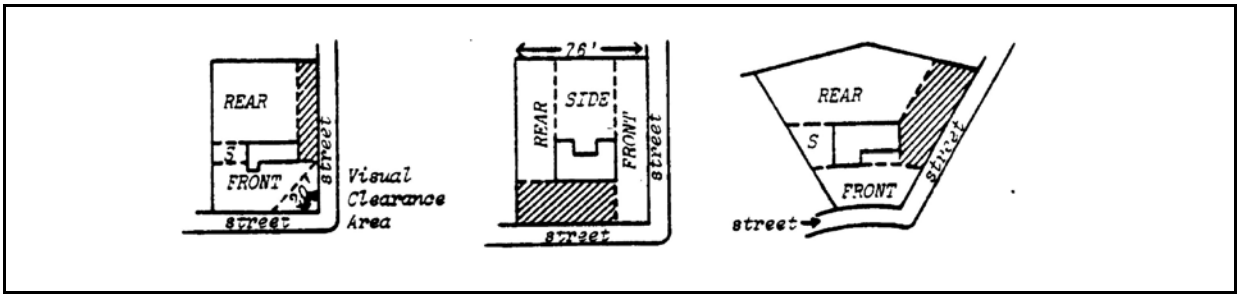

Figure 1.6-29 - Exterior Side Yard

Yard, Front - As shown in Figure 1.6-30 - Font Yard below, the yard extending across the full width of the lot, the depth of which is the minimum horizontal distance between the front lot line and a line parallel to the nearest point of the main building.

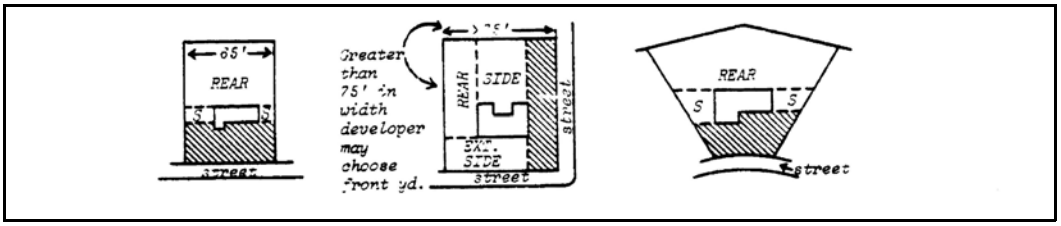

Figure 1.6-30 - Front Yard

Yard, Rear - As shown in Figure 1.6-31 - Rear Yard below, yard extending across the full width of the lot, the depth of which is the minimum horizontal distance between the rear lot line and a line parallel to the nearest point of the main building.

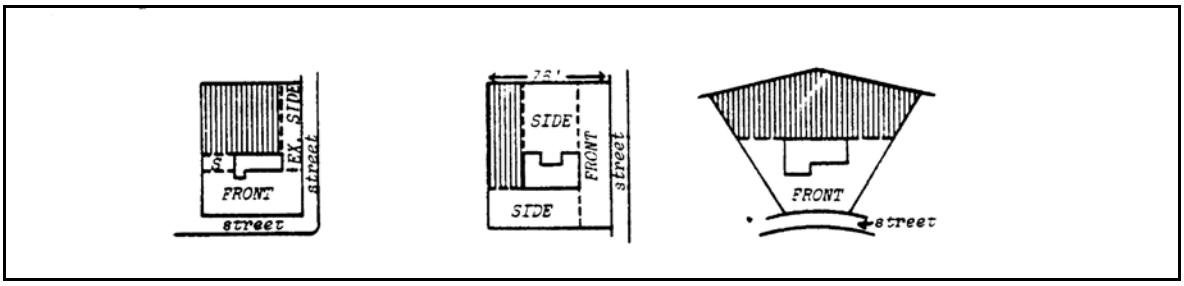

Figure 1.6-31 - Rear Yard

Yard, Side - As shown in Figure 1.6-32 - Side Yard below, yard between the main building and the side lot line extending from the front yard or front lot line where no front yard is required, to the rear yard. The width of the required side yard is the minimum horizontal distance between the side lot line and a line parallel to the nearest point of the main building.

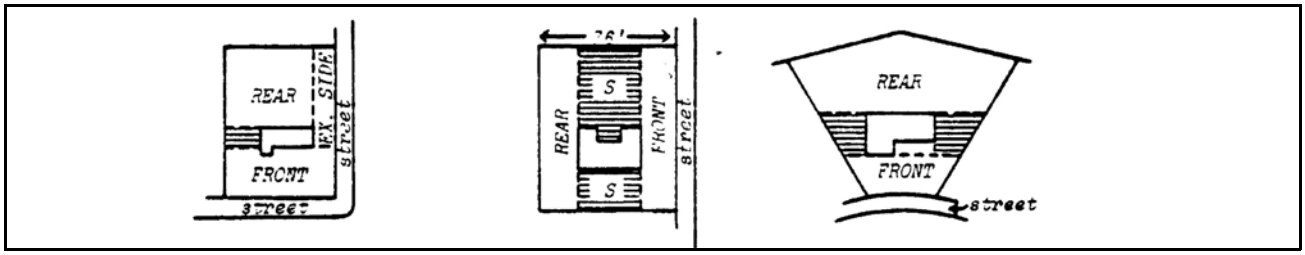

Figure 1.6-32 - Side Yard

Zone - Area of land within the Corvallis City limits designated for specific types of permitted developments and subject to the development requirements of that zone.

Zone Change - Amendment to the boundaries of zones shown on the Official Zoning Map. Procedures for this type of land use application are outlined in Sections 1.2.90.01 and 1.2.110.03 - Special Development, and Chapter 2.2 - Zone Changes.

Section 1.6.40 - SPECIFIC WORDS AND TERMS PARTICULAR TO THE 100-YEAR FLOODPLAIN REGULATIONS IN LDC CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT AND CHAPTER 4.5 - FLOODPLAIN PROVISIONS.

THE DEFINITIONS PROVIDED BELOW ONLY PERTAIN TO INSTANCES WHERE THE SUBJECT WORD OR TERM IS USED WITHIN THE CONTEXT OF 100-YEAR FLOODPLAIN REGULATIONS PRIMARILY PRESENTED IN LDC CHAPTER 4.5 - FLOODPLAIN PROVISIONS & LDC CHAPTER 2.11 - FLOODPLAIN DEVELOPMENT PERMIT. NOTE - WHERE DEFINED WORDS OR TERMS ARE USED WITHIN THE DEFINITIONS OF OTHER WORDS OR TERMS PROVIDED BELOW, THE DEFINITIONS FROM SECTION 1.6.40 APPLY	
Word or Term	**100-year Floodplain-Specific Definition**
Area of Shallow Flooding	A designated AO or AH Federal Flood Zone on a community's Flood Insurance Rate Map (FIRM) with base flood Depth Number(s) from one to three ft., and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Also includes additional areas that meet the FEMA definition for the AO or AH Federal Flood Zones, but which are located in areas not currently identified in the Flood Insurance Study for Benton County, Oregon and Incorporated Areas, dated June 2, 2011. Such additional areas must be identified in an independent study that is developed by the State of Oregon or a registered engineer and approved by the Floodplain Administrator or designee, in accordance with Section 4.5.50.03.p. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Area of Special Flood Hazard	See "Special Flood Hazard Area" in this Section 1.6.40.*[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Base Flood	Flood that has a one percent chance of being equaled or exceeded ~~ocurring~~ in any given year. Also commonly referred to as the 100-year Flood, the Base Flood has been adopted by the Federal Emergency Management Agency (FEMA) for Floodplain management purposes, and refers to a flood event that inundates the entire 100-year Floodplain. See Floodplain, 100-Year and Flood, 100-Year. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Base Flood Elevation	The water surface elevation during the Base Flood in relation to a specified Datum. The Base Flood Elevation (BFE) is depicted on the Flood Insurance Rate Map to the nearest foot and in the Flood Insurance Study to the nearest 0.1 foot. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Administrator or designee is authorized through Sections 4.5.50.03.p and 4.5.60.01.b to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas and the associated Base Flood Elevation as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. *[Model Ordinance Section II - Definitions]*
Basement	The portion of a structure with its floor sub grade (below ground level) on all sides. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Below-grade Crawlspace	An enclosed area below the Base Flood Elevation in which the interior grade is not more than two ft. below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 ft. at any point. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Building Codes	The combined specialty codes adopted under ORS 446.062, 446.185, 447.020 (2), 455.020 (2), 455.496, 455.610, 455.680, 460.085, 460.360, 479.730 (1) or 480.545, but does not include regulations adopted by the State Fire Marshal pursuant to ORS chapter 476 or ORS 479.015 to 479.200 and 479.210 to 479.220. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Critical Facility	A facility that is critical for the health and welfare of the population and is especially important to be located above the Base Flood Elevation following hazard events. The following is the list of Critical Facilities for the purposes of Section 4.5.110.09: **a.** Hospitals and other medical facilities having surgery and emergency treatment areas; **b.** Fire and police stations; **c.** Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures. These tanks or other structures do not include City water distribution facilities' **d.** Emergency vehicle shelters and garages; **e.** Structures and equipment in emergency-preparedness centers; **f.** Standby power generating equipment for essential facilities; **g.** Structures and equipment in government communication centers and other facilities required for emergency response; and [ORS 455.447] *[ORS 455.447 & Model Ordinance Section II - Definitions]* **h.** Other facilities as determined by the Floodplain Administrator or designee. Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities. The Taylor Water Treatment plant along the Willamette River is an example of such a facility. It is pulling water from the Willamette River. Because of this fact, these types of facilities have purposefully been excluded the list above.

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Word or Term	**100-year Floodplain-Specific Definition**
Depth Number	The depth of a Base Flood in a designated AO or AH Federal Flood Zone. These AO and AH Federal Flood Zones consist of an Area of Shallow Flooding and the Base Flood depths in those Areas of Shallow Flooding are the Depth Numbers. These Depth Numbers typically range from one to three ft. See "Area of Shallow Flooding" in Section 1.6.40.
Development	Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, fencing, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the Special Flood Hazard Area. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Digital Flood Insurance Rate Map	Depicts flood risk and Federal Flood Zones and flood risk information. The Digital Flood Insurance Rate Map (DFIRM) presents the flood risk information in a format suitable for electronic mapping applications. *[Model Ordinance Section II - Definitions]*
Elevated Building	A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns. *[Model Ordinance Section II - Definitions]*
Existing Building or Structure	A Structure for which the Start of Construction commenced before {insert the date of initial FIRM}. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*
Federal Emergency Management Agency (FEMA)	The agency with the overall responsibility for administering the National Flood Insurance Program. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**	
Federal Flood Zone	Federal Flood Zones are geographic areas that the Federal Emergency Management Agency (FEMA) has defined according to varying levels of flood risk. These Federal Flood Zones are depicted on a community's Flood Insurance Rate Map (FIRM) or on Floodplain study maps approved by the Floodplain Administrator or designee. Each Federal Flood Zone reflects the severity or type of flooding in the area. *[FEMA website & Chapter 4.5 - Floodplain Provisions]*	
	a. High Risk Areas - These areas are all in the Special Flood Hazard Area (the 100-yr. Floodplain). In communities that participate in the National Flood Insurance Program (NFIP), mandatory flood insurance purchase requirements apply to all of these Federal Flood Zones. *[FEMA website]*	
	Federal Flood Zone	**Description**
	A	Areas with a one percent chance of flooding and a 26 percent chance of flooding over the life of a 30-yr. mortgage. Because detailed analyses are not performed for such areas; no Depth Numbers or Base Flood Elevations are shown within areas with this Federal Flood Zone.*[FEMA website]*
	AE & A1-A30	The base Floodplain where Base Flood Elevations derived from detailed analyses are shown at selected intervals. Areas with a one percent chance of flooding and a 26 percent chance of flooding over the life of a 30-yr. mortgage. The AE Federal Flood Zone is now used on the new format Flood Insurance Rate Maps (FIRMS) instead of the old format of A1 - A30 Federal Flood Zones.*[FEMA website and handouts]*
	AH	Areas with a one percent chance of shallow flooding, usually in the form of a pond, with an average Depth Number ranging from one to three ft. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. Base Flood Elevations derived from detailed analyses are shown at selected intervals within areas with this Federally Flood Zone.*[FEMA website]*
	AO	River or stream flood hazard areas, and areas with a one percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average Depth Number ranging from one to three ft. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. Average flood Depth Numbers derived from detailed analyses are shown within areas with this Federal Flood Zone.*[FEMA website]*
	AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A Federal Flood Zones if the structure is built or restored in compliance with Federal Flood Zone AR Floodplain management regulations.*[FEMA website]*
	A99	Areas with a one percent chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No Depth Numbers or Base Flood Elevations are shown within areas with this Federal Flood Zone.*[FEMA website]*

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Word or Term	**100-year Floodplain-Specific Definition**	
Federal Flood Zone definition continued	**b. Moderate to Low Risk Areas -** These areas are **outside of** the Special Flood Hazard Area. In communities that participate in the National Flood Insurance Program (NFIP), flood insurance is available to all property owners and renters in these Federal Flood Zones. *[FEMA website]*	
	Federal Flood Zone	**Description**
	B & X (Shaded)	Area of moderate flood hazard, usually the area between the limits of the 100-yr. and 500-yr. floods. Federal Flood Zone B is also used to designate base floodplains of lesser hazards, such as areas protected by levees from the 100-yr. Flood, or shallow flooding areas with average Depth Numbers of less than one ft. or drainage areas less than one sq. mile. *[FEMA website]*
	C & X (Unshaded)	Area on minimal flood hazard, usually depicted on Flood Insurance Rate Maps (FIRMs) as above the 500-yr. flood level. Federal Flood Zone C may have ponding and local drainage problems that don't warrant a detailed study or designation as base floodplain. Federal Flood Zone X is the area determined to be outside the 500-yr. flood and protected by levee from the 100-yr. Flood. *[FEMA website]*
	V	Coastal Areas with a one percent or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. No Base Flood Elevations are shown within areas with this Federal Flood Zone *[FEMA website]*
	V & V1-30	Coastal Areas with a one percent or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26 percent chance of flooding over the life of a 30-yr. mortgage. Base Flood Elevations derived from detailed analyses are shown at selected intervals on areas in this Federal Flood Zone. *[FEMA website]*
	c. Undetermined Risk Areas - *[FEMA website]*	
	Federal Flood Zone	**Description**
	D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk. *[FEMA website]*

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Word or Term	**100-year Floodplain-Specific Definition**
Flood or flooding	A general and temporary condition of partial or complete inundation of normally dry land areas from: (a) the overflow of inland or tidal waters; or (b) the unusual and rapid accumulation or runoff of surface waters from any source. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Flood Insurance Rate Map (FIRM)	An official map ~~on which~~ of a community, issued by the Federal Insurance Administration, ~~has delineated~~ delineating the ~~areas of~~ S~~s~~pecial F~~f~~lood H~~h~~azard~~s~~ Areas and/or ~~the~~ risk premium Federal Flood Zones applicable to ~~portions of~~ the community. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Flood Insurance Study (FIS)	The official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles, floodway boundaries and water surface elevations of the Base Flood. *[44 CFR 59.1, modified, & Model Ordinance Section II - Definitions]*
Flood, 100-year	Flood with a one percent chance of being equaled or exceeded ~~occurring~~ in any given year. This is the flood most commonly used for regulatory purposes and is called the Base Flood. As shown below in Figure 1.6-16 - Floodplain Cross Section, this flood event inundates the entire 100-year Floodplain. See Base Flood. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*
Floodplain	As shown below in Figure 1.6-16 - Floodplain Cross Section, the area adjacent to a stream or river channel that is covered by water when the river or stream overflows its banks. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*
Floodplain Development Permit	Federally required permit required prior to construction and other development in any Special Flood Hazard Area (100-yr. Floodplain). See Chapter 2.11 - Floodplain Development Permit. *[44 CFR 60.3(a) & Model Ordinance Section III-D]*

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Word or Term	**100-year Floodplain-Specific Definition**
Floodplain Functions	Hydrological and ecological functions including conveyance and temporary storage of floodwater, depositions of sediments outside of the channel, ground water recharge, filtering of pollutants, and reduction of floodwater velocity and erosive forces. Also included, but to a lesser extent in previously urbanized areas, are such functions as nutrient exchange, refuges, and feeding areas for fish.*[Current Code]*

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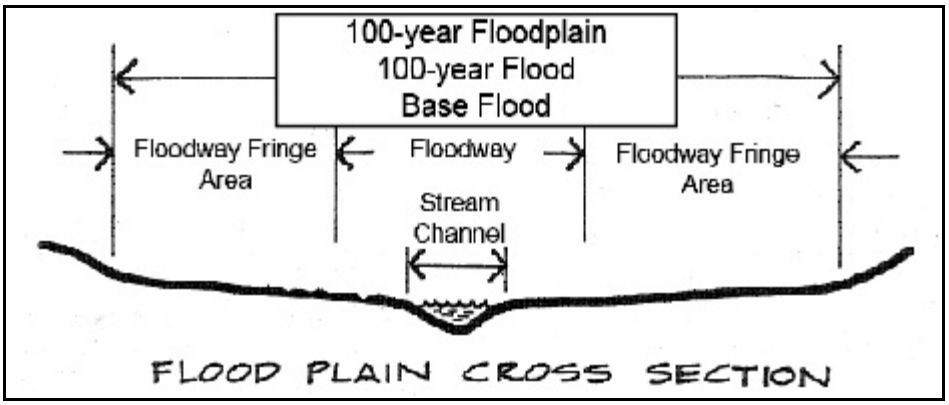
Word or Term	**100-year Floodplain-Specific Definition**
Floodplain, 100-year	As shown below in Figure 1.6-16 - Floodplain Cross Section, land area adjacent to a river, stream, or other water body that is subject to a one percent or greater chance of flooding in any given year. It consists of land ranging from that which is subject to annual flooding to that which has a one percent or greater chance of flooding in any given year. The 100-year Floodplain consists of the Floodway and the Floodway Fringe. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) and is the area subject to Base Flood regulations. Not every potential Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps. The Floodplain Administrator or designee is authorized through Sections 4.5.50.03.p and 4.5.60.01.b to obtain the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing development proposals that affect the 100-year Floodplain. Such information shall be used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps and these areas are also subject to Base Flood regulations. See Base Flood ~~and 100-year Flood~~.*[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions for Special Flood Hazard Area]*  Figure 1.6-16 - Floodplain Cross Section

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Word or Term	**100-year Floodplain-Specific Definition**
Floodway (Regulatory Floodway)	The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge and store the floodwater or flood flows associated with the regulatory flood.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]* **a. Floodway, 0.2-ft.** - As shown above ~~below~~ in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the W~~w~~ater S~~s~~urface E~~e~~levation more than 0.2 ft. The Regulatory Floodway for the City of Corvallis is the 0.2-ft. Floodway. **b. Floodway, 1.0-ft.** - As shown above ~~below~~ in Figure 1.6-16 - Floodplain Cross Section, river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the W~~w~~ater S~~s~~urface E~~e~~levation more than 1.0 ft. The Federal Emergency Management Agency (FEMA) identifies the Regulatory Floodway as the 1.0-ft. Floodway, but also recognizes the City of Corvallis 0.2-ft. Floodway as the Regulatory Floodway for the City of Corvallis. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Floodway Fringe	As shown in Figure 1.6-16 - Floodplain Cross Section, the area of the 100-year Floodplain lying outside of the Floodway. Context is the 0.2-ft. Floodway, unless specifically identified as the 1.0-ft. Floodway. See Floodway (Regulatory Floodway)~~, 0.2-ft. and Floodway, 1.0-ft~~. *[Current Code]*
Flow-through Design	Typically a structure that does not displace surface floodwater or hinder or obstruct the movement of ~~or displace~~ surface floodwater.*[Current Code, just moved]*
Highest Adjacent Grade (HAG)	The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevation Certificate, FEMA Form 81-31, for more information. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Historic Structure	A structure that is: **a.** Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; **b.** Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district; **c.** Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; **d.** Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either: 1. By an approved state program as determined by the Secretary of the Interior, or; 2. Directly by the Secretary of the Interior in states without approved programs.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Hydrodynamic Load	Force of water in motion. *[Current Code - just moved]*
Hydrostatic Load	Force of water at rest. *[Current Code - just moved]*
Lateral Addition	An addition that requires a foundation to be built outside of the foundation footprint of the existing building. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Letter of Map Change (LOMC)	An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories: **a. Letter of Map Amendment (LOMA)** - A revision based on technical data showing that a property was incorrectly included in a designated Special Flood Hazard Area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a Special Flood Hazard Area. **b. Letter of Map Revision (LOMR)** - A revision based on technical data showing, usually due to manmade changes, alterations to Federal Flood Zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure has been elevated through the placement of fill above the Base Flood Elevation and is excluded from the Special Flood Hazard Area. **c. Conditional Letter of Map Revision (CLOMR)** - A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies. *[Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Lowest Floor	Lowest Floor is defined as follows: **a. Lowest Floor of Buildings and Structures Other Than Manufactured Dwellings -** The Lowest F~~f~~loor of buildings and structures other than manufactured dwellings is the lowest enclosed area ~~in a building,~~(including ~~a~~ basement). An unfinished or flood-resistant enclosure used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a structure's Lowest Floor, provided that the enclosed area is built and maintained in accordance with the applicable design requirements of the state Building Code. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]* **b. Lowest Floor of Manufactured Dwellings -** The Lowest Floor of a manufactured dwelling is the bottom of the longitudinal chassis frame beam.*[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*
Mean Sea Level	For purposes of the National Flood Insurance Program, the North American Vertical Datum of 1988 or other Datum, to which Base Flood Elevations shown on a community's FIRM are referenced. *[44 CFR 59.1, modified to add new datum, & Model Ordinance Section II - Definitions]*
New Construction	A Structure for which the Start of Construction commenced after {insert the date of effective FIRM}, and includes subsequent Substantial Improvements to the Structure. *[44 CFR 59.1, modified for clarity, & Model Ordinance Section II - Definitions]*
Shallow Flooding, Area of	See "Area of Shallow Flooding" in this Section 1.6.40. *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*
Special Flood Hazard Area	The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Federal Flood Zone designations on FIRMs include the letters A or V. Also known as the Special Flood Hazard Area (SFHA). See also "Floodplain, 100-year." *[44 CFR 59.1, simplified, & Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Special Occupancy Structure	The following are Special Occupancy Structures: **a.** Covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons; **b.** Buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers; **c.** Buildings for colleges or adult education schools with a capacity greater than 500 persons; **d.** Medical facilities with 50 or more resident, incapacitated patients not included in subparagraphs “a” to “c,” above; **e.** Jails and detention facilities; and **f.** All structures and occupancies with a capacity greater than 5,000 persons. *[ORS 455.447 & Model Ordinance Section II - Definitions]*
Start of Construction	Includes Substantial Improvement and means the date the Building Permit was issued, provided the actual Start of Construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a Substantial Improvement, the actual Start of Construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the alteration affects the external dimensions of a building. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

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Word or Term	**100-year Floodplain-Specific Definition**
Structure	A walled and roofed building, a manufactured dwelling, a modular or temporary building, or a gas or liquid storage tank that is principally above ground. *[44 CFR 59.1, modified for clarify & Model Ordinance Section II - Definitions]*
Substantial Damage	Damage of any origin sustained by a structure located within the 100-year Floodplain, whereby the cost of restoring the structure to its prior condition would equal or exceed 50 percent of the structure's market value before the damage occurred. ~~Substantial Damage also pertains to flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds 25 percent of the structure's market value before the damage occurred. Note: Pursuant to Section 4.5.50.06 of Chapter 4.5 - Natural Hazard and Hillside Development Provisions, no encroachments, including infill, new construction, substantial improvements, or other development, except as provided in Section 4.5.50.06.c, are allowed within the 0.2-ft.-Floodway.~~ *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Substantial Improvement	See "Substantial Improvement" in main list of definitions for this Chapter 1.6 - Definitions.*[44 CFR 59.1 & Model Ordinance Section II - Definitions]*
Water Surface Elevation	See "Water Surface Elevation" in main list of definitions for this Chapter 1.6 - Definitions. *[44 CFR 59.1 & Model Ordinance Section II - Definitions]*

THIS CHAPTER IS AN ENTIRELY NEW CHAPTER TO IMPLEMENT THE FEDERAL REQUIREMENTS FOR A FLOODPLAIN DEVELOPMENT PERMIT LAND USE PROCESS. THIS CHAPTER WORKS HAND-IN-HAND WITH THE NEWLY REVISED CHAPTER 4.5 - FLOODPLAIN PROVISIONS. PLAIN FONT IS USED IN THIS CHAPTER BECAUSE IT IS ENTIRELY NEW.

CHAPTER 2.11
FLOODPLAIN DEVELOPMENT PERMIT

Section 2.11.10 - BACKGROUND

To participate in the National Flood Insurance Program (NFIP), a community must adopt and enforce a Floodplain management ordinance that regulates Development in the Floodplain. This Floodplain management ordinance is housed primarily in Chapter 4.5 - Floodplain Provisions, but is in part addressed in other chapters of this Code. One of the basic Federal requirements for regulating Development in the Floodplain is a requirement for a Floodplain Development Permit before construction or other Development begins within any Special Flood Hazard Area (100-yr. Floodplain). In this context, the term "Development" is defined in Section 1.6.40 of Chapter 1.6 - Definitions. This chapter contains provisions for the Federally required Floodplain Development Permit and is consistent with the National Flood Insurance Program (NFIP) regulations.*[44 CFR 60.3(a)& Model Ordinance Section III-D]*

Section 2.11.20 - PURPOSES

Procedures and standards for the review of Floodplain Development Permits are established in this Chapter for the following purposes:

a. Protect human life, health and property; *[Model Ordinance Section I-C(1)]*

b. Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in Floodplains; *[Model Ordinance Section I-C(2)]*

c. Help maintain a stable tax base by providing for the sound use and Development of flood-prone areas; *[Model Ordinance Section I-C(3)]*

d. Minimize expenditure of public money for costly flood control projects;*[Model Ordinance Section I-C(4)]*

e. Minimize the need for rescue and emergency services associated with flooding and generally undertaken at the expense of the general public; *[Model Ordinance Section I-C(5)]*

f. Minimize unnecessary disruption of commerce, access and public service during times of flood;*[Model Ordinance Section I-C(6)]*

g. Facilitate the notification of potential buyers that property is in an Special Flood Hazard Area;*[Model Ordinance Section I-C(7)]*

h. Compel those who occupy property within the Special Flood Hazard Area to assume responsibility for their actions; and *[Model Ordinance Section I-C(8)]*

i. Manage the alteration of Special Flood Hazard Areas, stream channels and shorelines to minimize the impact of Development on the natural and beneficial functions of the Floodplain.*[Model Ordinance Section I-C(9)]*

Section 2.11.30 - APPLICABILITY

Unless exempt per Section 2.11.40, below, approval of a Floodplain Development Permit is required prior to initiating Development activities in any Special Flood Hazard Areas (SFHAs) established through Section 4.5.20.01.b. As defined in Section 1.6.40, Development means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, fencing, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within a Special Flood Hazard Area. *[44 CFR 60.3(a)(1) and (b)(1) & Model Ordinance Section IV-C]*

2.11.40 - EXEMPTIONS

If allowed by other applicable chapters in this Code (floodplain development may be prohibited per Chapter 4.5 - Floodplain Provisions, or other restrictions may apply), the following types of Development are exempt from the Floodplain Development Permit process: *[De minimus thresholds developed by Corvallis staff in coordination with FEMA/DLCD]*

a. **Placement of Fill in Residential Zones** - Within the Floodway Fringe, placement of fill in the RS-1, RS-3.5, RS-5, RS-6, RS-9, RS-9U, RS-12, RS-12U, RS-20 and MUR Zones, provided it is consistent with other applicable provisions of this Code and provided all of the following are met:

1. The fill is used solely for the purpose of constructing a sandbox, a raised gardening bed, or other similar landscape feature;

2. There are no undeveloped portions of the site that are outside the Floodway Fringe that can accommodate the items described in “a.1,” above;

3. The fill does not occupy an area that is greater than 10 percent of the minimum lot size of the corresponding zone or 10 percent of the area of the subject lot that is within the Floodway Fringe, whichever is less; and

4. The average depth of the fill does not exceed six in. over the area described in “a.3,” above;

b. **Construction of Fences and Walls** - Installation, expansion, reconstruction, and replacement of fences and/or walls within the Floodway Fringe, provided the velocity of the flood waters where the fence or wall is proposed is less than 5 ft. per second, as documented in the Flood Insurance Study for Benton County and Incorporated Areas, dated _____, 2010. Fencing and walls installed, expanded, reconstructed, and/or replaced in areas where the flood water velocity is greater than 5 ft. per second shall obtain a Floodplain Development Permit and shall comply with Section 4.5.110.12. If no Floodplain study is available to confirm the velocity of flood water flow, either the flood water velocity shall be determined consistent with Section 4.5.50.03.p to confirm whether the proposed fence and/or wall is exempt from obtaining a Floodplain Development Permit, or the flood water velocity shall be assumed to be greater than 5 ft. per second, and the fence and/or wall shall obtain a Floodplain Development Permit and be constructed consistent with the provisions in Section 4.5.110.12. *[Oregon Guidance Concerning Fencing & Walls in Special Flood Hazard Areas, FEMA/DLCD & Corvallis Staff Discussions, & Model Ordinance Section V-M]*

c. Maintenance, repair, and/or replacement of existing infrastructure facilities, provided the facilities:

1. Are in-kind maintenance, repair, and/or replacement; and

2. Will not result in an increase in Base Flood Elevation.

d. Maintenance, minor repair, and/or improvement of existing structures, provided these activities do not:

1. Result in an increase in size or intensity of use;

2. Constitute repair of Substantial Damage; or

3. Constitute a Substantial Improvement;

e. Public agency placement of signs, markers, aids, etc.;

f. Customary dredging associated with routine channel maintenance to maintain existing channel capacity, provided it is consistent with State and Federal laws and permits;

g. Removal of vegetation activities, provided they are consistent with Section 4.5.80.03.a; and

h. Landscape maintenance activities, provided they are consistent with Section 4.5.80.03.b.

Section 2.11.50 - PROCEDURES

2.11.50.01 - Application Requirements

An application for a Floodplain Development Permit shall be made on forms provided by the Floodplain Administrator or designee and shall include the following information, where applicable. When the Floodplain Administrator or designee deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived. For example, the waiving of some of the application requirements below can occur to address projects that are small or less complex in nature. However, the Floodplain Administrator or designee shall ensure that enough information is submitted to properly evaluate a proposed application's adherence to the applicable criteria. *[Modified version of standard Code text]*

a. Location and description of the subject property(ies), including all of the following, as relevant: street address; tax assessor map and tax lot number; parcel number; written description of the boundaries of the proposal; and one set of assessor's maps of the subject site and surrounding area, with the subject site outlined in red; *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

b. Signed consent by the subject property's owner(s) and/or the owner's legal representative(s). If a legal representative is used as a signatory, written proof of ability to be a signatory shall be furnished to the City. The owner's name(s) and address(es), and the applicant's name, address, and signature shall also be provided; *[Standard Code text]*

c. Three copies of a narrative, on 8.5 by 11 in. sheets, describing how the application meets the review criteria in Section 2.11.50.04, below, and three copies of the supporting graphics at an 8.5 by 11 in. size. The Floodplain Adminstrator or designee may request additional copies of the narrative and/or graphics for routing purposes, if needed. Related names/numbers must be legible on the graphics. The Floodplain Administrator or designee may also require some or all graphics at a 24

by 36-in. size if, for legibility purposes, such a size would be helpful; *[Standard Code text]*

d. Three sets of full-scaled black line or blueprint drawings of the site plan graphic(s) on sheet size of at least 11 in. by 17 in. suitable for photocopy reproduction. Site plan(s) and other graphics shall be drawn to scale and shall contain a sheet title, date, north arrow, and legend placed in the same location on each sheet and show:

1. Information required by Sections 4.5.50.02, 4.5.50.03, and 4.5.50.04, as applicable;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a&b)]*

2. Information required by Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, as applicable; and *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a&b)]*

3. Any other information relevant to the proposal; and *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

e. Adequate information for the Floodplain Administrator or designee to assess whether or not a Substantial Improvement is proposed or Substantial Damage has occurred. See Floodplain Administrator or designee for specific requirements and procedures for these determinations;*[FEMA-213 & FEMA-301 & Model Ordinance Section IV-D(1&2)]*

f. An electronic version of these documents (both text and graphics, as applicable). The applicant shall coordinate with the City regarding compatible electronic formats, to the greatest extent practicable. Any data submitted to substantiate Base Flood elevation(s), flood Depth Number(s), 0.2-ft. Floodway boundaries, or 100-year Floodway Fringe boundaries shall be compatible with the City's GIS system. *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

2.11.50.02 - Acceptance of Application

Per ORS 227, the Floodplain Administrator or designee shall review the Floodplain Development Permit application for compliance with the application requirements in Section 2.11.50.01, above. If the application is incomplete, the Administrator or designee shall notify the applicant and state what information is needed to make the application

complete. Unless the Floodplain Administrator or designee determines that additional time is warranted, the applicant shall have a maximum of 10 days from this notification to submit additional materials. *[Standard Code text]*

2.11.50.03 - Staff Evaluation

The application and any comments that have been received shall be reviewed to ensure consistency with the review criteria in Section 2.11.50.04, below.*[Standard Code text]*

2.11.50.04 - Review Criteria

Requests for approval of a Floodplain Development Permit shall be reviewed by the Floodplain Administrator or designee to ensure:

a. Consistency with the standards from Sections 4.5.80, 4.5.90, and 4.5.100, as applicable; *[Standard Code text - refers to 0.2-ft. Floodway, High Protection Floodplain, & Partial Protection Floodplain standards in Chapter 4.5 - Floodplain Provisions]*

b. New Development and subdivisions shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize flood damage;*[44 CFR 60.3(a)(4&5) & Model Ordinance Section V-A(5)]*

c. On-site waste disposal systems shall be located and constructed to avoid functional impairment, or contamination from them during flooding;*[44 CFR 60.3(a)(6) & Model Ordinance Section V-A(6)]*

d. Subdivisions shall have adequate drainage provided to reduce exposure to flood hazards. In AO and AH Federal Flood Zones, stormwater management shall be provided to guide floodwater around and away from all proposed and existing structures.*[44 CFR 60.3(a)(4) & (c)(1&11) & Model Ordinance Section V-A(7)]* This criteria shall be considered to be met if the proposed stormwater management is consistent with the provisions of the Building Code, Chapter 4.0 - Improvements Requirement with Development, and the provisions addressed in "e," below;

e. Consistency with other applicable standards of this Code; the standards of all acknowledged City Facility Master Plans; the adopted City Design Criteria Manual; the adopted Oregon Structural Specialty Code; the adopted International Fire Code; the adopted City Standard Construction Specifications; the adopted City Erosion Prevention and Sediment Control Ordinance; the adopted City Off-street Parking Standards; and any other applicable policies and standards adopted by the City Council; and *[streamlined version of Standard Code text]*

f. Preservation and/or protection of Significant Natural Features is achieved, consistent with Chapter 4.2 - Landscaping, Buffering, Screening, and Lighting, Chapter 4.5 - Floodplain Provisions, Chapter 4.11 - Minimum Assured Development Area (MADA), Chapter 4.12 - Significant Vegetation Protection Provisions, Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. *[Streamlined version of Standard Code text]*

2.11.50.05 - Action on Application

Based on the review criteria above, the Floodplain Administrator or designee shall review the proposed Development and either approve, conditionally approve, or deny the application.*[Standard Code text]* Floodplain Development Permits are processed like Building Permits, using a Ministerial Development process.

2.11.50.06 - Mandatory Conditions of Approval

The following Conditions of App roval are mandatory and shall be imposed on every approved Floodplain Development Permit:

a. **Required As-built Certification During Construction** - For all new construction and Substantial Improvements, the permit holder shall provide to the Floodplain Administrator or designee an as-built certification of the floor elevation or flood-proofing elevation immediately after the Lowest Floor or flood-proofing is placed and prior to further vertical construction. Any deficiencies identified by the Floodplain Administrator or designee shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator or designee or the Building Official to issue a stop-work order for the project.*[44 CFR 59.24 & 60.3(a)(1) & (b)(1) & Model Ordinance Sections IV-C & IV-C(2)(a & b)]*

b. **Required Documentation Prior to Issuance of Certificate of Occupancy**

1. In addition to the requirements of the Building Codes pertaining to Certificate of Occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation to the Floodplain Administrator or designee and the documentation shall be prepared and sealed by a registered surveyor or engineer:*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(a)]*

   a) For elevated buildings and structures in Special Flood Hazard Areas (all A Federal Flood Zones), the as-built elevation of the Lowest Floor,

including basement, or where no Base Flood Elevation is available the height above Highest Adjacent Grade of the Lowest Floor;*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(a)(i)]*

b) For buildings and structures that have been floodproofed, the elevation to which the building or structure was floodproofed.*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(a)(iii)]*

2. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or designee or the Building Official to withhold a Certificate of Occupancy until such deficiencies are corrected.*[44 CFR 59.24 & 60.3(a)(1) & (b)(1&5) & Model Ordinance Section IV-C(3)(b)]*

2.11.50.07 - Permit

The Floodplain Administrator or designee shall provide the applicant with a permit that includes a written statement of the decision, a reference to the findings leading to it, any Conditions of Approval, and the appeal period deadline. The permit shall also be mailed to any persons who request such a decision. The permit and all applicable information shall be available in the Community Development Department.*[Standard Code text]*

2.11.50.08 - Permanent Retention of Development Applications - The Floodplain Administrator or designee shall maintain both paper and electronic permanent records of all Floodplain Development Permits. *[FEMA Independent Study 9, August 1999, and FEMA Region X Local Administrator's Handbook, 2000]*

2.11.50.09 - Appeals

a. The decision of the Floodplain Administrator or designee may be appealed to the Land Development Hearings Board in accordance with Chapter 2.19 - Appeals.*[Standard Code text]*

b. **Appeal Review Criteria** - An appeal of a decision made by either the Floodplain Administrator or designee or the Land Development Hearings Board shall be reviewed against the criteria set forth in Section 2.11.50.04. In acting on an appeal, the hearing body shall make specific findings in response to each of the appeal review criteria. *[Standard Code text]*

2.11.50.10 - Effective Date

Unless an appeal has been filed, the decision of the Floodplain Administrator or designee shall become effective 12 days after the permit is signed. *[Standard Code text]*

2.11.50.11 - Effective Period of Approval

a. A Floodplain Development Permit shall expire 180 days after the permit is effective per Section 2.11.50.10, unless:

1. Start of Construction for the permitted activity has occurred and thereafter is pursued to completion; or*[44 CFR 59.1 & Model Ordinance Section IV-C(4)(a)]*

2. An extension consistent with Building Permit extension procedures is granted by the Floodplain Administrator or designee, in cases where Start of Construction has not yet occurred. However, the granting of such extension shall also require the Floodplain Administrator or designee to review the Floodplain Development Permit activity(ies) relative to the applicable Code requirements to ensure that the Floodplain Development Permit is still consistent with Code provisions. If the Floodplain Administrator or designee finds that the Floodplain Development Permit is still consistent with the applicable Code requirements, then the extension may be granted by the Floodplain Administrator or designee. If the Floodplain Administrator or designee finds that the Floodplain Development Permit is no longer consistent with the applicable Code requirements, then the Floodplain Administrator or designee shall deny the extension request.

b. Commencement of work includes Start of Construction, when the permitted work requires a Building Permit. *[44 CFR 59.1 & Model Ordinance Section IV-C(4)(b)]*

2.11.60 - VARIANCES

An application filed for a Floodplain Development Permit Variance shall comply with the following:

2.11.60.01 - Limited Scope of Variance Applications

a. Variances are limited to the following:

1. Altering the required elevation standard for new construction and Substantial Improvements on a lot less than or equal to one-half acre, provided the lot is contiguous to and surrounded by lots with existing structures constructed

below the Base Flood Elevation; *[44 CFR 60.6(a)(2) & Model Ordinance Section VI-B(2)]*

2. Allowing a Water Dependent use, provided structures or other Development are protected by methods that minimize flood damages during the Base Flood and create no additional threats to public safety;*[44 CFR 60.6(a)(7) & Model Ordinance Section VI-B(5)]*

3. Reconstructing, rehabilitating, or restoring a Designated Historic Resource upon a determination that the proposed restoration, rehabilitation, or restoration will not preclude the structure's continued designation as a Designated Historic Resource and the Variance is the minimum necessary to preserve the historic character and design of the structure; or *[44 CFR 60.6(a) & Model Ordinance Section VI-B(6)]*

4. Allowing a lesser degree of floodproofing than watertight or dry-floodproofing for nonresidential buildings in very limited circumstances, where it can be determined that such action will have low damage potential and otherwise comply with Building Codes.*[44 CFR 60.6 & Model Ordinance Section VI-B(8)]*

b. Variance requests that exceed the limited scope described above in "a," above, shall be made through the Planned Development process in Chapter 2.5 - Planned Development. *[See modifications to Chapter 2.5 - Planned Development. Those modifications augment the Planned Development application materials and review criteria to add those in this new Chapter 2.11. Thus, the review criteria is a combination of the standard Planned Development criteria, plus the Floodplain Development Permit Variance criteria, plus the standard Floodplain Development Permit criteria, as applicable.]*

2.11.60.02 - Variance Application Requirements

When the Floodplain Administrator or designee deems any requirement below unnecessary for proper evaluation of a proposed application, it may be waived.*[Standard Code text]*

An application for a Floodplain Development Permit Variance shall include:

a. The items listed above in Sections 2.11.50.01 and an application submittal fee equal to that of a Major Lot Development Option application submittal fee; *[Model Ordinance Section VI-A(1)]*

b. Narrative explaining the basis for the Variance request and how the request still meets the purposes in Section 2.11.20 and 4.5.10; and *[Model Ordinance Section VI-A(1)]*

c. Other narrative and technical information sufficient to demonstrate compliance with the review criteria in Section 2.11.60.06. The applicant shall also provide narrative and technical information sufficient to demonstrate compliance with the review criteria in Section 2.11.50.04 which can still be met, despite the Floodplain Development Permit Variance request.*[Model Ordinance Section VI-A(1) & Standard Code text]*

2.11.60.03 - Acceptance of Variance Application - An application for a Floodplain Development Permit Variance shall be accepted and reviewed in accordance with the procedures in Section 2.12.30.02.b, except that public notice distance shall be in accordance with Section 2.11.60.04, below. *[Model Ordinance Section VI-A(2) & Standard Code text]*

2.11.60.04 - Public Notice for a Variance Application - The public notice for a Floodplain Development Permit Variance shall be issued in accordance with the provisions in Section 2.0.50.04, except that the public notice distance shall be 300 ft., as required for the land use applications in Section 2.0.50.04.c.2. *[Model Ordinance Section VI-A(3) & Standard Code text]*

2.11.60.05 - Staff Evaluation - The Floodplain Administrator or designee shall prepare a report that evaluates whether or not the proposal qualifies as a Floodplain Development Permit Variance per Section 2.11.60.01, includes the required application materials per Section 2.11.60.02, meets the purposes in Sections 2.11.20 and 4.5.10, and complies with the review criteria in Section 2.11.60.06. The Floodplain Administrator or designee shall also evaluate the proposed Floodplain Development Permit Variance with respect to the review criteria in Section 2.11.50.04, to see how many of the criteria can still be met. The report shall include a recommendation for approval or denial and, if needed, a list of conditions for the Land Development Hearings Board to consider if an approval is granted. *[Standard Code text]*

2.11.60.06 - Review Criteria for a Variance Application

In reviewing requests for the approval of a Floodplain Development Permit Variance, the Land Development Hearings Board shall consider the purposes of this Chapter, the purposes in Section 4.5.10, the Variance thresholds contained in Section 2.11.60.01, the base Floodplain Development Permit review criteria in Section 2.11.50.04, standards specified in other sections of this chapter and Chapter 4.5 - Floodplain Provisions, all technical evaluations, and the criteria in "a," through "d," below. All of the criteria in "a,"

through "d," below, shall be met. In addition, all of the review criteria in Section 2.11.50.04 shall be met, with the exception of specific aspects of the criteria that cannot be met because of the nature of the Floodplain Development Permit Variance request. It is the applicant's burden to show that the Variance is warranted and meets said criteria. *[Model Ordinance Section VI-A(4&5) & Standard Code text]*

a. Variances shall not be issued within a designated Floodway if any increase in flood levels during the Base Flood discharge would result.[1] *[44 CFR 60.6(a)(1&7) & Model Ordinance Section VI-B(1&5)]*

b. Variances shall only be issued upon a determination that the Variance is the minimum necessary, considering the flood hazard, to afford relief.*[44 CFR 60.6(a)(4) & Model Ordinance Section VI-B(3)]*

c. Variances shall only be issued upon a:*[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)]*

1. Showing of good and sufficient cause;*[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(a)]*

2. Determination that failure to grant the Variance would result in exceptional hardship to the applicant;*[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(b)]*

3. Determination that the granting of the Variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, or creation of nuisances; and *[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(c)]*

4. Determination that the granting of the Variance will not cause fraud on or victimization of the public, or conflict with existing local laws or ordinances. *[44 CFR 60.6(a)(3) & Model Ordinance Section VI-B(4)(c)]*

d. Variances shall consider the following additional factors:*[Model Ordinance Section VI-A(5)]*

[1]There are unique circumstances under which the Floodplain Administrator or designee may allow a rise in Base Flood Elevation in the Floodway - see Sections 4.5.50.04 and 4.5.80.05. However, these exceptions are granted via the provisions of those two Code sections and not through the Variance provisions of this chapter. *[44 Code of Federal Regulations (CFR) Part 60.3(d)(4)]*

1. The danger that materials may be swept onto other lands to the injury of others as a result of approving the Variance request;*[Model Ordinance Section VI-A(5)(a)]*

2. The potential to endanger life and property due to flooding or erosion damage caused by approval of the Variance request;*[Model Ordinance Section VI-A(5)(b)]*

3. The susceptibility of the proposed facility and its contents to flood damage, and the effect of such damage on the individual owner and adjacent properties;*[Model Ordinance Section VI-A(5)(c)]*

4. The importance of the services provided by the proposed facility to the community;*[Model Ordinance Section VI-A(5)(d)]*

5. The necessity to the facility of a waterfront location, where applicable;*[Model Ordinance Section VI-A(5)(e)]*

6. The availability and viability of alternate locations for the proposed use that are not subject to flooding or erosion damage;*[Model Ordinance Section VI-A(5)(f)]*

7. The compatibility of the proposed use with existing and anticipated Development. This criteria shall be considered to be met if the proposed application meets the review criteria in Section 2.11.50.04.e;*[Model Ordinance Section VI-A(5)(g)]*

8. The relationship of the proposed use to the Floodplain management program for that area;*[Model Ordinance Section VI-A(5)(g)]*

9. The safety of access to the property in times of flood for ordinary and emergency vehicles;*[Model Ordinance Section VI-A(5)(h)]*

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters, and the effects of wave action, if applicable, expected at the site; and *[Model Ordinance Section VI-A(5)(i)]*

11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges. *[Model Ordinance Section VI-A(5)(j)]*

2.11.60.07 - Action on Variance Application - The Land Development Hearings Board shall conduct a public hearing in accordance with Chapter 2.0 - Public Hearings. Following the close of the public hearing, the Board shall approve, conditionally approve, or deny the Floodplain Development Permit Variance. The Board's decision shall include findings that specify how the application has or has not complied with the review criteria in Section 2.11.60.06. The Board's decision shall also include findings that specify the extent to which the application has or has not complied with the original Floodplain Development Permit review criteria in Section 2.11.50.04. *[44 CFR 60.6(a)(5) & Model Ordinance Section VI-C]*

2.11.60.08 - Notice of Disposition - The Floodplain Administrator or designee shall provide the applicant with a Notice of Disposition in accordance with Chapter 2.0 - Public Hearings that includes a written statement of the Land Development Hearings Board's decision, a reference to findings leading to it, any Conditions of Approval, and the appeal period deadline. *[Standard Code text]*

If a Variance is granted to allow the construction of a building below the Base Flood level, the property owner shall be put on notice along with the written decision that the permitted building will have its Lowest Floor below the Base Flood Elevation or flood depth, and that the cost of flood insurance likely will be commensurate with the increased flood damage risk. *[44 CFR 60.6(a)(5) & Model Ordinance Section VI-C]*

A Notice of Disposition shall also be mailed to persons who presented oral or written testimony at the public hearing. *[Standard Code text]*

2.11.60.09 - Permanent Retention of Variance Applications - The Floodplain Administrator or designee shall maintain a permanent record of all Floodplain Development Permit Variances, and report any Variances to the Federal Emergency Management Agency upon request. *[44 CFR 60.6(a)(6) & Model Ordinance Section VI-A(7)]*

2.11.60.10 - Appeals - The decision of the Land Development Hearings Board may be appealed in accordance with Chapter 2.19 - Appeals.*[Standard Code text]*

2.11.60.11 - Effective Date - Unless an appeal has been filed, the decision of the hearing authority shall become effective 12 days after the Notice of Disposition is signed.*[Standard Code text]*

2.11.60.12 - Effective Period of Approval -

a. A Floodplain Development Permit Variance shall expire 180 days after issuance unless:

1. Start of Construction for the permitted activity has occurred and thereafter is pursued to completion; or*[44 CFR 59.1 & Model Ordinance Section IV-C(4)(a)]*

2. An extension consistent with Building Permit extension procedures is granted by the Floodplain Administrator or designee, in cases where Start of Construction has not yet occurred. However, the granting of such extension shall also require the Floodplain Administrator or designee to review the Floodplain Development Permit Variance activity(ies) relative to the applicable Code requirements to ensure that the scope of the Variance activities has not deviated further from Code provisions as a result of any subsequent Land Development Code Text Amendment(s). If the Floodplain Administrator or designee finds that the Floodplain Development Permit Variance has not deviated further from the applicable Code requirements, then the extension may be granted by the Floodplain Administrator or designee. If the Floodplain Administrator or designee finds that the Floodplain Development Permit Variance does indeed vary further from applicable Code requirements, then the Floodplain Administrator or designee shall deny the extension request.

b. Commencement of work includes Start of Construction, when the permitted work requires a Building Permit. *[44 CFR 59.1 & Model Ordinance Section IV-C(4)(b)]*

CHAPTER 4.5 HAS BEEN RENAMED. IT USED TO BE "CHAPTER 4.5 - NATURAL HAZARDS AND HILLSIDE DEVELOPMENT PROVISIONS." THE LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS WERE MOVED TO A NEW CHAPTER CALLED "CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS." THE EXISTING CHAPTER 4.5 IS NOW CALLED "CHAPTER 4.5 - FLOODPLAIN PROVISIONS." THE DOUBLE UNDERLINE AND ~~STRIKE-OUT~~ FONTS USED BELOW INDICATE THE CHANGES NEEDED TO ADDRESS THIS CODE CHAPTER SPLIT AND ALSO ADDRESS THE FEMA UPDATE PROJECT.

CHAPTER 4.5
~~NATURAL HAZARD AND HILLSIDE DEVELOPMENT~~ FLOODPLAIN PROVISIONS

Section 4.5.10 - PURPOSES - ~~NATURAL HAZARD~~ FLOODPLAIN PROVISIONS

Without establishing any priority, the purposes of this Chapter are intended to:

a. Protect human life, health, and property~~Reduce flood damage and loss of life~~ in areas subject to periodic flooding; *[Model Ordinance Section I-C(1)]*

~~**b.** Reduce damage and loss of life from other Natural Hazards, including steep slopes, landslide risk areas, and landslide-related risk areas;~~

b~~c~~. Implement the Floodplain requirements of Statewide Planning Goal 7 - which relates to Areas Subject to Natural Disasters and Hazards;

c~~d~~. Implement some of the land use aspects of the City's Stormwater Master Plan, as well as some aspects of the City's Endangered Species Act Salmon Response Plan;

d~~e~~. Through Floodplain regulation, contribute to the Properly Functioning Condition of Streams and rivers and address, in part, the water quality aspects of Statewide Planning Goal 6;

e~~f~~. Manage stormwater drainage in a manner that:

1. Maintains the Properly Functioning Conditions of Streams;

2. Provides for the conveyance and temporary storage of floodwater;

3. Reduces floodwater velocity;

4. Facilitates sediment deposition in the Floodplain;

5. Provides an opportunity for groundwater recharge; and

6. Promotes other Stormwater and Floodplain functions.

These provisions are also intended to minimize maintenance costs, eliminate potential hazards before they occur, and protect properties and persons adjacent to drainageways and to other Natural Hazard areas;

f~~g~~. Implement requirements for the City's participation in the National Flood Insurance Program, including the Community Rating System;~~.~~

g. Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in Floodplains; *[Model Ordinance Section I-C(2)]*

h. Help maintain a stable tax base by providing for the sound use and Development of flood-prone areas; *[Model Ordinance Section I-C(3)]*

i. Minimize expenditure of public money for costly flood control projects; *[Model Ordinance Section I-C(4)]*

j. Minimize the need for rescue and emergency services associated with flooding and generally undertaken at the expense of the general public; *[Model Ordinance Section I-C(5)]*

k. Minimize unnecessary disruption of commerce, access and public service during times of flood; *[Model Ordinance Section I-C(6)]*

l. Facilitate the notification of potential buyers that property is in an Special Flood Hazard Area; *[Model Ordinance Section I-C(7)]*

m. Compel those who occupy the Special Flood Hazard Areas to assume responsibility for their actions; *[Model Ordinance Section I-C(8)]*

n. Manage the alteration of Special Flood Hazard Areas, stream channels and shorelines to minimize the impact of Development on the natural and beneficial functions of the Floodplain; and *[Model Ordinance Section I-C(9)]*

o. **Methods of Reducing Flood Losses -** In order to accomplish its purpose, this chapter and Chapter 2.11 - Floodplain Development Permit include methods and provisions to: *[Model Ordinance Section I-D]*

1. Require that Development that is vulnerable to floods, including buildings, structures, and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction; *[Model Ordinance Section I-D(1)]*

2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion; *[Model Ordinance Section I-D(2)]*

3. Control filling, grading, dredging and other Development which may increase flood damage or erosion; *[Model Ordinance Section I-D(3)]*

4. Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands; *[Model Ordinance Section I-D(4)]*

5. Preserve and restore natural Floodplains, stream channels, and natural protective barriers which carry and store flood waters, and; *[Model Ordinance Section I-D(5)]*

6. Coordinate with and supplement provisions of Oregon Building Codes.*[Model Ordinance Section I-D(6)]*

p. To advance~~In order to assist in the furtherance of~~ these purposes, where not required, creation of open space tracts is encouraged within areas designated as Natural Resources or Natural Hazards on the Comprehensive Plan and Official Zoning Maps.

Section 4.5.20 - APPLICABILITY

4.5.20.01 - ~~Which~~ Natural Hazards that are Subject to this Chapter -

a. These provisions apply to~~: 1. P~~public and private properties in the 100-year Floodplain of rivers and local Streams;

~~2. Areas with slopes equal to or greater than 10 percent;~~

~~3. High landslide risk areas;~~

~~4. Existing landslide areas; and~~

~~5. Landslide debris run-out areas.~~

b. **Mapping of Natural Hazards** - ~~1.Natural Hazards Map -~~ The Natural Hazard areas in "a," above, are mapped on the Corvallis Natural Hazards Map.

The Special Flood Hazard Areas identified by the Federal Emergency Management Agency in its Flood Insurance Study for Benton County and Incorporated Areas, dated _____, 2010, with accompanying Flood Insurance Rate Maps or Digital Flood Insurance Rate Maps, and other supporting data, are adopted by reference and declared a part of the 100-year Floodplain regulations presented below. The Flood Insurance Study and the Flood Insurance Rate Map are on file at the office of the City of Corvallis Engineer at 1245 NE Third Street, Corvallis, Oregon 97330, and at the Development Services Division at 501 SW Madison Avenue, Corvallis, Oregon, 97333. Not every Special Flood Hazard Area within the Urban Growth Boundary has been mapped by the Federal Emergency Management Agency through the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above. The Floodplain Administrator or designee is authorized through Sections 4.5.50.02, 4.5.50.03.p, and 4.5.60.02.b to obtain from applicants the information necessary to determine the presence and extent of unmapped Special Flood Hazard Areas as part of reviewing Development proposals that affect the 100-year Floodplain. Once approved by the Floodplain Administrator or designee, such information shall be incorporated into the Natural Hazards Map and used by the City of Corvallis to supplement the Flood Insurance Study, Flood Insurance Rate Maps, and Digital Flood Insurance Rate Maps cited above to ensure consistency with the 100-year Floodplain regulations contained in this Chapter and Chapter 2.11 - Floodplain Development Permit.~~The Flood Insurance Study for the City of Corvallis, dated July 2, 1984, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRM) and Flood Boundary & Floodway Maps of Corvallis, Oregon, dated January 3, 1985, and any revisions thereto, are the basis for establishing areas of special flood hazard (100-year Floodplain) and are hereby adopted by reference and declared to be part of this Ordinance.~~ *[44 CFR 60.3(b)(1), (c)(1), and (d)(2) & Model Ordinance Section III-B]*

~~2. Exclusion of Corvallis Fault Line and Liquifaction Soils - Hazards associated with the Corvallis Fault Line and liquefaction soils are not addressed as part of this Code. Hazards associated with the Corvallis Fault Line, and with fault lines in general, are difficult to anticipate. This is in part because the Fault has not been precisely mapped and in part because other faults may exist in the area which are not yet known. The hazards posed by liquefaction soils can be addressed by the application of more stringent building construction requirements. However, the City will have a map(s) available for informational purposes to show the approximate location of the Corvallis Fault Line and the location of liquefaction soils. These hazards may need to be addressed per the requirements of the adopted Building Code and/or per the recommendations of geologic studies, etc.~~

4.5.20.02 - Coordination with Building Codes and Greater Restrictions

a. **Coordination with Building Codes** - Pursuant to the requirement established in ORS 455 that the City of Corvallis administers and enforces the State Building Codes, the City Council of the City of Corvallis does hereby acknowledge that the State Building Codes contain certain provisions that apply to the design and construction of buildings and structures located in Special Flood Hazard Areas. Therefore, this chapter and Chapter 2.11 - Floodplain Development Permit are intended to be administered and enforced in conjunction with the State Building Codes. *[ORS 455 & Model Ordinance Sections I-C(4) & V-E]*

b. **Greater Restrictions** - This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and any other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. *[Needed change for chapter structure, given other changes]*

4.5.20.03 - Exceptions to Achieve Minimum Assured Development Area (MADA)

a. **General -** Chapter 4.11 - Minimum Assured Development Area (MADA) explains how Minimum Assured Development Area (MADA) is determined. If the application of Natural Hazard regulations outside prohibited areas, or if the cumulative impact of such Natural Hazard regulations and the application of the regulations in Chapter 4.12 - Significant Vegetation Protection Provisions and Chapter 4.13 - Riparian Corridor and Wetland Provisions would limit the developable portion of a property below the property's MADA, then Development will be allowed on the property, to the degree necessary to achieve the MADA, as explained in Chapter 4.11 - Minimum Assured Development Area. However, use of MADA provisions to develop~~ment~~ in the 0.2-ft. Floodway is prohibited, ~~in certain areas, regardless of MADA,~~ as outlined in Sections 4.5.90.05 and 4.5.100.03, as well as Section 4.11.50.05 of Chapter 4.11 - Minimum Assured Development Area~~.~~; and

b. **Floodway Fringe Development Pursuant to MADA Provisions Requires Adherence to Partial Protection Floodplain Provisions -** In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.100 - Standards in Partial Protection Floodway Fringe. See Sections 4.5.90.05 and 4.5.100.03.

Section 4.5.30 - DISCLAIMER OF LIABILITY

The degree of flood ~~and other Natural Hazard~~ protection required by this Chapter and Chapter 2.11 - Floodplain Development Permit is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods and hazard events can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. Areas impacted by other Natural Hazards may differ from those shown on the Corvallis Natural Hazards Map. Neither ~~T~~this Chapter nor Chapter 2.11 - Floodplain Development Permit~~does not~~ implies~~y~~ that land outside the ~~areas of~~ S~~s~~pecial F~~f~~lood H~~h~~azard~~s~~ Areas or Uses permitted within such areas will be free from flooding or flood damages, nor does it imply that land outside of mapped hazard areas will be free from damage or earth movement in a hazard event. Neither ~~T~~this Chapter nor Chapter 2.11 - Floodplain Development Permit shall ~~not~~ create liability on the part of the City of Corvallis, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages or other hazard damages that result from reliance on this chapter and Chapter 2.11 - Floodplain Development Permit, ~~Ordinance~~ or any administrative decision lawfully made hereunder. Compliance with the minimum standards established by this Chapter is not intended to relieve any private party from liability for the design or construction of Development which causes damage or injury by increasing flooding or aggravating an existing and known hazard. *[Existing text, but satisfies FEMA Region X & Model Ordinance Section III-F]*

~~**Section 4.5.50 - STANDARDS FOR AREAS OF SPECIAL FLOOD HAZARD - 100 YEAR FLOOD PLAIN**~~

Section 4.5.5~~40.01~~ - FINDINGS OF FACT, DEFINITIONS, AND RELATED STANDARDS ~~**Definitions and Related Standards**~~

4.5.40.01 - Findings of Fact -

a. The Special Flood Hazard Areas of the City of Corvallis are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.*[44 CFR 59.22 & Model Ordinance Section I-B(1)]*

b. These flood losses are caused by buildings and structures in Special Flood Hazard Areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in Floodplains causing increases in flood heights and velocities.*[44 CFR 59.22 & Model Ordinance Section I-B(2)]*

c. The City of Corvallis has the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper Floodplain management.*[44 CFR 59.22 & Model Ordinance Section I-B(3)]*

4.5.40.02 - Definitions

a.~~4.5.50.01c~~ Specific Definitions for Phrases Related to 100-Year Floodplain Regulations - See Section 1.6.40 for the full set of definitions that are unique to the 100-year Floodplain regulations presented below. *[Needed change for chapter structure, given other changes]*

b.~~4.5.50.01a~~ 100-year Floodplain, 0.2-ft. Floodway, and Floodway Fringe -

1. 100-year Floodplain - The 100-year Floodplain is a land area adjacent to a river, stream or other water body that is subject to a one percent or greater chance of flooding in any given year. The Floodplain is divided into two sections: the Floodway and Floodway Fringe areas. The 100-year Floodplain is mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps (FIRMs) or, for areas not mapped by FEMA, it is mapped via Floodplain studies approved by the Floodplain Administrator or designee. It is also referred to as the Special Flood Hazard Area and is the area subject to Base Flood regulations. See Figure 4.5-1 - Components of 100-year Floodplain; and the following definitions in Section 1.6.40: Floodway (Regulatory Floodway);~~,~~ Floodplain - 100-year;~~,~~ Flood,100-year;~~,~~ Base Flood;~~,~~ and Floodway Fringe.~~, and Figure 1.6-16 - Floodplain Cross Section in Chapter 1.6 - Definitions. See also the Area of Special Flood Hazard definition in Chapter 1.6 - Definitions.~~ *[Model Ordinance Section II definition for Special Flood Hazard Area & needed changes for chapter structure, given other changes]*

2. 0.2-ft. Floodway - The 0.2-ft. Floodway is defined as the river channel or other watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the W~~w~~ater S~~s~~urface E~~e~~levation more than 0.2 ft. See Figure 4.5 -1 - Components of 100-year Floodplain~~,~~; and the Floodway (Regulatory Floodway) definition in Section 1.6.40. ~~Floodway, 0.2-ft. in Chapter 1.6 - Definitions~~. The Regulatory Floodway for the City of Corvallis is the 0.2-ft. Floodway. However, unless development qualifies as one of the exceptions per Sections 2.11.40, 4.5.50.04, or 4.5.80.05, no rise in BFE is allowed. *[Needed changes for chapter structure, given other changes]*

3. Floodway Fringe - The Floodway Fringe is defined as the area of the 100-year Floodplain lying outside of the 0.2-ft. Floodway. See Figure 4.5 -1 - Components of 100-year Floodplain; and the following definitions in Section 1.6.40: Floodway Fringe and Floodway (Regulatory Floodway). However, unless development qualifies as one of the exceptions per Sections 2.11.40, 4.5.50.04, or 4.5.80.05,

no rise in BFE is allowed. ~~, 0.2-ft. in Chapter 1.6 - Definitions~~.*[Needed changes for chapter structure, given other changes]*

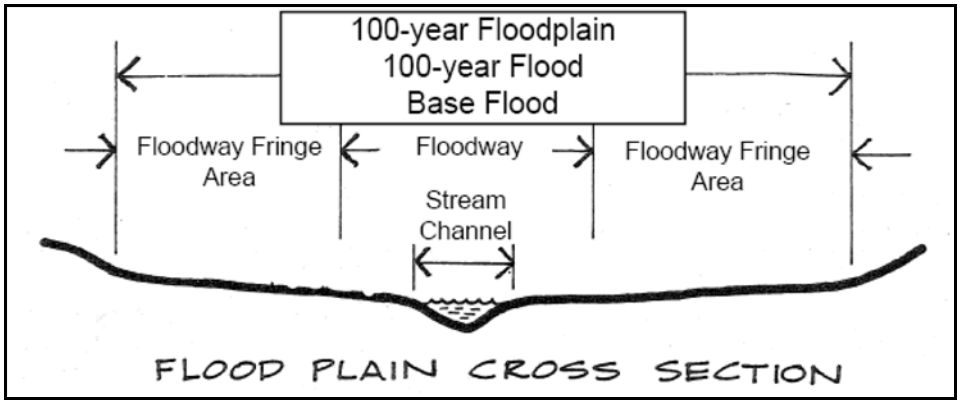
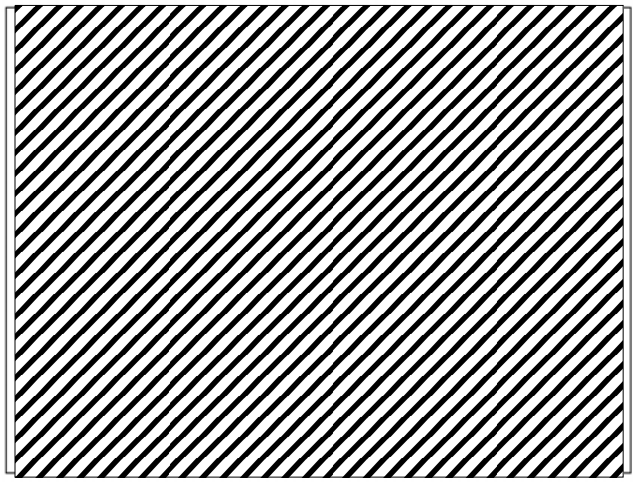


Figure 4.5-1 - Components of the 100-year Floodplain
Where development is allowed per Code provisions, no rise in Base Flood Elevation (BFE) is allowed, unless the development qualifies as one of the specific exceptions outlined in Sections 2.11.40, 4.5.50.04, or 4.5.80.05.

NOTE: Delete Graphic below & use graphic above instead, to better match existing Chapter 1.6 - Definitions graphics and to remove the inconsistency between the old graphic below and the current Code standards that do not allow a rise in the Base Flood Elevation. During the Phase III Code Update Project, the old graphic below was retained in the current Code to demonstrate how the actual 0.2-ft. Floodway boundary was calculated. It was not meant to imply that a rise in BFE was allowed in the Floodway Fringe.



4.5.40.03 - ~~b~~. Relationship of 0.2-ft. Floodway and Floodway Fringe to Regulated Riparian Corridors ~~Figure 4.5-1 - Components of 100-year Floodplain~~ Areas of the 0.2-ft. Floodway and Floodway

Fringe that fall within a Regulated Riparian Corridor are also subject to the provisions of Chapter 4.13 - Riparian Corridor and Wetland Provisions. Where regulations are in conflict, the most restrictive shall apply. See Riparian Corridor, Regulated in Chapter 1.6 - Definitions.

Section 4.5.~~4~~50 - PROCEDURES

Compliance with the provisions of this Chapter shall be determined through the development review processes identified in Section 1.2.110 of Chapter 1.2 - Legal Framework and in Chapter 2.11 - Floodplain Development Permit. Applications for Excavation and Grading Permits, Floodplain Development Permits, Building Permits or other permits for buildings and structures on sites containing the 100-year Floodplain ~~or other Natural Hazard areas, as defined in Section 4.5.20,~~ shall be submitted and reviewed to ensure compliance with specifications referenced herein; and to ensure that Development is reasonably safe from anticipated hazards. Such applications ~~for Excavation and Grading Permits, Building Permits or other permits for structures~~ also include those ~~for~~ needed for Manufactured Dwellings. Other Development activities as described in this provision include all the activities listed in the Section 1.6.40 definition for Development. However, unless development qualifies as one of the exceptions per Sections 2.11.40, 4.5.50.04, or 4.5.80.05, no rise in BFE is allowed. ~~, but are not limited to, mining, dredging, filling, grading, paving, and excavating.~~

4.5.50.01 - Floodplain Development Permit - A Floodplain Development Permit shall be obtained consistent with Chapter 2.11 - Floodplain Development Permit, prior to initiating Development activities in any Special Flood Hazard Area established through Section 4.5.20.01.b. Floodplain Development Permit applications shall include the items listed in Sections 4.5.50.02, 4.5.50.03, 4.5.50.04, as applicable, and the items listed in Section 2.11.50.01. *[44 CFR 60.3(a) & Model Ordinance Section III-D]*

4.5.50.02~~4.5.40.a.~~ - Development Application - Development applications for all properties containing or abutting a mapped or unmapped Special Flood~~Natural~~ Hazard A~~a~~rea shall accurately indicate the locations of these features and the location of any proposed ~~d~~Development. These d~~D~~evelopment applications ~~shall~~ include Floodplain Development Permits, Excavation and Grading Permits, Building Permits, Public Improvements by Private Contract Permits (PIPC), and any land use application identified in Chapter 2.1 - Comprehensive Plan Amendment through Chapter 2.14 - Partitions, Minor Replats, and Lot Line Adjustments. The Building Official, City Engineer, Floodplain Administrator or designee, or Community Development Director may determine that the following information is not necessary in conjunction with permits for work that would not exacerbate hazard conditions in any way. *[Needed change for chapter structure, given other changes]*

4.5.50.03~~4.5.40.b.~~ - Required Information~~, General~~ - Unless deemed unnecessary per Section 4.5.50.02, a~~A~~ll such ~~d~~Development applications shall include the following information:

a~~1~~. A site plan showing the proposed ~~d~~Development on the site, drawn to a standard scale and including an illustrated scale for use in reductions; *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

b~~2~~. Location of all proposed infrastructure necessary to serve the proposed ~~d~~Development. Such infrastructure includes streets, driveways, water, sanitary sewer, and storm drainage; *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

c~~3~~. Land uses within 300 ft. of the subject property;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

d~~4~~. Title block;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

e~~5~~. North arrow and bar scale;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

f~~6~~. Date(s) of field check(s);*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

g~~7~~. A grading plan, if grading is to occur, showing existing and finished contours on the site, at two- ft. contour intervals;*[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

h~~8~~. Sources of information, such as national, state, or local soil survey maps; and City maps such as Comprehensive Plan and Zoning Maps, the Natural Hazards Map, the Significant Vegetation Map, the Riparian Corridors and Wetlands Map; and date and scale of aerial photos, etc.; and *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

i~~9~~. Any other relevant submittal requirements identified for ~~d~~Development in areas with other specific Natural Hazards, as specified in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. ~~sections 4.5.50, 4.5.60, and 4.5.70~~. *[44 CFR 60.3(a)(1) & (b)(1) & Model Ordinance Section IV-C(1)(a)]*

~~**4.5.50.02 - Additional Application Requirements within the 100-year Floodplain**~~
~~In addition to the application requirements in Section 4.5.40, the following information is required with development applications involving property in the 100-year Floodplain:~~

j~~a~~. **Building and Structure Elevations** - For all existing and proposed, relocated, or expanded buildings and structures, e~~E~~levation in relation to the Highest Adjacent Grade, the North American ~~National Geodetic~~ Vertical Datum ~~1929 (NGVD29), of either the~~ 1988 (NAVD88), and the Base Flood Elevation, or the flood Depth Number in AO Federal Flood Zones, as applicable, of the: *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C, IV-C(1)(b & c) & V-A(3 & 4)]*

1. Lowest enclosed area ~~finished floor level~~ of all existing and proposed, relocated, or expanded ~~new~~ buildings and structures. This includes Crawlspaces, basement~~s~~ floors and attached garages, electrical equipment (except utility meters), heating and ventilation equipment, plumbing, air conditioning equipment, and/or other service facilities (including ductwork); ~~or~~ *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(c)(i) & V-A(3 & 4)]*

2. Top of proposed garage slabs; and *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(c)(ii) & V-A(3 & 4)]*

3. Next highest floor situated above the items in "1," and "2," above.*[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(c)(iii) & V-A(3 & 4)]*

k.~~2.~~ Elevation to which any existing building or structure has been or is proposed to be flood-proofed; and certification by a registered professional engineer that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in Section ~~4.5.50.08.c.4~~4.5.110.08, below;*[44 CFR 60.3(a)(1 & 4), (b)(1 & 5), & (c)(4) & Model Ordinance Sections IV-C(1)(e & f) & V-A(3 & 4)]*

l. The locations and sizes of all flood openings in any proposed buildings and structures;*[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-C(1)(d) & V-A(3&4)]*

m~~b~~. A description of the extent to which any Floodplain or Watercourse is proposed to be altered or affected as a result of proposed ~~d~~Development;*[44 CFR 60.3(a)(1 & 4) & (b)(1 & 6) & Model Ordinance Sections IV-C(1)(g) & V-A(3&4)]*

n~~c~~. **Topographic Survey** - A topographic survey of the ~~d~~Development site, showing existing and proposed topography in two-ft. contour intervals. The survey shall indicate the location of Top-of-bank, consistent with the definition in Chapter 1.6 - Definitions. The survey shall show the 0.2-ft. Floodway boundary and the 100-year Floodway Fringe boundary. The survey shall also show the location of existing and proposed improvements on the site,

including buildings, structures, fencing, walls, landscaping, storage of materials or equipment, drainage facilities, parking areas, and other impervious surface areas. The survey shall be drawn to scale and shall note the distance from Top-of-bank to the improvements on the site; *[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-B(5-7), IV-C(1)(a & b) & V-A(3 & 4)]*

od. **Base Flood Elevation** - The applicable Base Flood Eelevation or, in AO Federal Flood Zones, the flood Depth Number;*[44 CFR 60.3(a)(1 & 4) & (b)(1) & Model Ordinance Sections IV-B(5-7), IV-C(1)(b & c) & V-A(3&4)]*

p. **Determination of Unmapped 100-year Floodplain Information** - The following shall be included with applications involving properties for which any of the items listed below have not been mapped consistent with Section 4.5.20.01.b, and contain or are suspected to contain a portion of the 100-year Floodplain. The applicant shall provide a scope of work for a Floodplain study to the Floodplain Administrator or designee. The Floodplain Administrator or designee shall review the scope of work to determine whether or not it is compliant with established procedures. The scope of work may or may not be required to include off-site areas. The final scope of work and Floodplain study shall be prepared by a licensed engineer and reviewed and approved by the Floodplain Administrator or designee. *[44 CFR 60.3(a)(1 & 4) & (b)(1 & 4) & Model Ordinance Sections IV-B(5-7), IV-C(1)(all), IV-C(1)(b), V-A(3 & 4), V-C(1), & V-D(1)]*

1. The boundary of the 100-year Floodplain. Newly mapped 100-yr. Floodplain areas shall be designated High Protection Floodplain;

2. The boundary of the 0.2-ft. Floodway;

3. A determination of the corresponding Federal Flood Zone (e.g., "A1-30," "AE," "AH," approximate "A," and "AO"), as applicable; and

4. The Base Flood Elevation for Federal Flood Zones "A1-30," "AE," "AH," and approximate "A," or flood Depth Number for Federal Flood Zone "AO," as applicable;

qe. All necessary federally-mandated or state-mandated permits issued by from those other governmental agencies shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit./from which approval is required by federal or state law, Such permits includeincluding but are not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, 16 U.S.C. 1531-1544, and State of Oregon Removal-Fill permits, as amended., shall be obtained, or obtaining such permits shall be a Condition of Approval to be satisfied prior to issuance of any construction permit.*[44*

CFR 60.3(a)(1, 2, & 4) & (b)(1) & Model Ordinance Sections IV-B(4) & V-A(3&4)]

4.5.50.04 - Provisions for New Technical Data When Conditional Letter of Map Revision (CLOMR) and Associated Letter of Map Revision (LOMR) Required

Notwithstanding prohibitions contained in Sections 4.5.80.01, 4.5.90.02, and 4.5.100, exceptional circumstances directly related to the construction of public infrastructure may necessitate an increase in the Base Flood Elevation within the 0.2-ft. Floodway and/or Floodway Fringe. The Floodplain Administrator or designee shall be responsible for determining whether exceptional circumstances exist. If such exceptional circumstances are found to exist, the applicant shall provide materials required by Section 4.5.50.02, 4.5.50.03, and 2.11.50.01 as part of a Floodplain Development Permit application and shall also be responsible for: *[44 CFR 60.3(c)(13) & (d)(4) & 65.3 & Model Ordinance Sections V-B(3 & 5), V-C(2), & V-Q]*

a. Having technical data prepared in a format required for a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) and submitting such data to FEMA on the appropriate application forms. Submittal and processing fees for these map revisions shall be the responsibility of the applicant;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

b. Covering all costs associated with obtaining a CLOMR or LOMR from FEMA. The City of Corvallis shall be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application; *[CFR and Model Ordinance cites above at the end of lead paragraph]*

c. Obtaining FEMA approval for the CLOMR or LOMR and including the written documentation of the approval to the Floodplain Administrator or designee as part of the application materials in Section 4.5.50.02 and 4.5.50.03, as well as part of the application materials for a Floodplain Development Permit required by Chapter 2.11 - Floodplain Development Permit; and *[CFR and Model Ordinance cites above at the end of lead paragraph]*

d. Obtaining from FEMA, within six months of project completion, a LOMR reflecting the as-built changes to the FIRM, and providing a copy of the FEMA-approved materials to the Floodplain Administrator or designee. This provision applies when the applicant obtains an approved CLOMR from FEMA, or when the applicant's Development modifies Floodplain boundaries

or Base Flood Elevations.*[CFR and Model Ordinance cites above at the end of lead paragraph]*

Section 4.5.60 - ADMINISTRATION AND INTERPRETATION

4.5.60.01 - Administration -

a. **Designation of a Local Floodplain Administrator** - The City Engineer is hereby appointed as the Floodplain Administrator. The City Engineer or designee is responsible for administering and implementing the provisions of this chapter and Chapter 2.11 - Floodplain Development Permit. *[44 CFR 59.22(b) & Model Ordinance Section IV-A]*

b. **Duties and Responsibilities of the Floodplain Administrator or Designee** - Duties of the Floodplain Administrator or designee shall include, but shall not be limited to: *[44 CFR 59.24 & 60.3(a)(1 - 4), (b)(4 & 5), & (d)(1) & Model Ordinance Section IV-B(1-17)]*

1. Review all Floodplain Development Permit applications to determine whether proposed new Development will be located in Special Flood Hazard Area;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

2. Review applications for modifications of any existing Development in Special Flood Hazard Areas for compliance with the requirements of this Chapter and Chapter 2.11 - Floodplain Development Permit;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

3. Interpret Special Flood Hazard Area boundaries, provide available Special Flood Hazard Area information, and provide Base Flood Elevations, where they exist;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

4. Review proposed Development to assure that applicants have obtained and provided the necessary permits from governmental agencies from which approval is required by federal or state law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334; the Endangered Species Act of 1973, 16 U.S.C. 1531-1544; and State of Oregon Removal-Fill permits. Copies of such permits shall be maintained on file;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

5. Review all Floodplain Development Permit applications to determine if the proposed Development is located in the 0.2-ft. Floodway; and, if so, ensure that the encroachment standards of Section 4.5.80 are

met;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

6. When Base Flood Elevation or Floodway data have not been identified by FEMA in a Flood Insurance Study and /or Flood Insurance Rate Maps, the Floodplain Administrator or designee shall require an applicant to provide a Floodplain study prepared by a licensed engineer, and the study shall be in accordance with Section 4.5.50.03.p. Newly mapped 100-yr. Floodplain areas shall be designated as High Protection Floodplain. Upon receipt and approval of this Floodplain study, the Floodplain Administrator or designee shall review, and reasonably utilize scientific or historic Base Flood Elevation and Floodway data available from a federal, state, or other source, in order to administer this chapter and Chapter 2.11 - Floodplain Development Permit;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

7. When Base Flood Elevations or other engineering data are not available from an authoritative source, the Floodplain Administrator or designee shall take into account the Special Flood Hazard Areas, to the extent they are known, to determine whether a proposed building site or Subdivision will be reasonably safe from flooding. Oregon Residential Specialty Code R324.1.3 authorizes the Building Official to require an applicant to determine a Base Flood Elevation where none exists. Additionally, Section 4.5.50.03.p authorizes the Floodplain Administrator or designee to require an applicant to provide a Floodplain study in accordance with the provisions of that Code section. Newly mapped 100-yr. Floodplain areas shall be designated as High Protection Floodplain;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

8. Where interpretation is needed of the exact location of boundaries of the Special Flood Hazard Areas, including regulatory Floodway (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Floodplain Administrator or designee shall make the interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 1.1.30;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

9. Issue Floodplain Development Permits when the provisions of Chapter 2.11 - Floodplain Development Permit have been met, or deny the same in the event of noncompliance;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

10. Coordinate with the Building Official to assure that applications for Building Permits comply with the requirements of this chapter and Chapter 2.11 - Floodplain Development Permit;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

11. Obtain from applicants, verify, and record the actual elevation in relation to the vertical datum used on the effective Flood Insurance Rate Map, or Highest Adjacent Grade where no Base Flood Elevation is available, of the Lowest Floor level, including Basement, of all New Construction or Substantially Improved buildings and structures;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

12. Obtain from applicants, verify, and record the actual elevation, in relation to the vertical datum used on the effective Flood Insurance Rate Map, or Highest Adjacent Grade where no Base Flood Elevation is available, to which any new or Substantially Improved buildings or structures have been flood-proofed. When flood-proofing is utilized for a structure, the Floodplain Administrator or designee shall obtain from applicants certification of design criteria from a registered professional engineer or architect;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

13. Ensure that all records pertaining to the 100-yr. Floodplain regulations presented in this Chapter are permanently maintained in the office of the Floodplain Administrator or designee and shall be open for public inspection;*[CFR and Model Ordinance cites above at the end of lead paragraph]*

14. Make inspections in Special Flood Hazard Areas to determine whether Development has been undertaken without issuance of a Floodplain Development Permit, ensure that Development is undertaken in accordance with a Foodplain Development Permit and the provisions of this Chapter and Chapter 2.11 - Floodplain Development Permit, and verify that existing buildings and structures maintain compliance with the provisions of this Chapter and Chapter 2.11 - Floodplain Development Permit; *[CFR and Model Ordinance cites above at the end of lead paragraph][Also 44 CFR 59.22, 59.24(b), & 59.2(b), & Model Ordinance Section V-T(1)]*

15. The Floodplain Administrator or designee shall make periodic inspections of Floodplain areas to establish that Development activities within the Floodplain are being performed in compliance with an approved Floodplain Development Permit. The Floodplain Administrator or designee shall prepare a field report listing non-complying conditions and shall proceed with enforcement actions including, but not limited to: the issuance of a Stop Work Order; the

issuance of a citation; and the commencement of civil legal proceedings;*[CFR and Model Ordinance cites above at the end of lead paragraph][Also 44 CFR 59.22, 59.24(b), & 59.2(b), & Model Ordinance Section V-T(1)]*

16. Coordinate with the Building Official to inspect areas where existing buildings and structures in Special Flood Hazard Areas have been damaged, regardless of the cause of damage, and notify owners that permits may be required prior to repair, rehabilitation, demolition, relocation, or reconstruction of the Building or Structure; and *[CFR and Model Ordinance cites above at the end of lead paragraph]*

17. Make Substantial Improvement or Substantial Damage determinations.*[CFR and Model Ordinance cites above at the end of lead paragraph]*

4.5.560.042 - Interpretation

a. Interpretation and Application of this Chapter and Chapter 2.11 - Floodplain Development Permit - In the interpretation and application of the 100-year Floodplain regulations presented below, all provisions shall be: *[FEMA Region 10 & Model Ordinance Section III-E(1-3)]*

1. Considered as minimum requirements;

2. Liberally construed in favor of the governing body, and;

3. Deemed neither to limit nor repeal any other powers granted under state statutes, including state Building Codes.

b. Interpretation of Flood Insurance Rate Map and Other Floodplain Boundaries - When there appears to be a conflict between a mapped boundary and actual field conditions, the ~~City Engineer~~Floodplain Administrator or designee shall determine the exact location of the boundaries of the Floodplain. Where FEMA Base Flood E~~e~~levation information is unavailable for Special F~~f~~lood H~~h~~azard A~~a~~reas, the ~~City Engineer~~Floodplain Administrator or designee shall obtain, review, and reasonably utilize any Base Flood E~~e~~levation and Floodway data as a basis for applying standards in the Floodway Fringe~~, 1.0-ft. Floodway,~~ and 0.2-ft. Floodway. The Floodplain Administrator or designee is authorized to require applicants to provide such information via Section 4.5.50.03.p.*[Model Ordinance Section IV-B(8)]*

Section 4.5.75~~0.05~~ - INCENTIVES FOR RELOCATING BUILDINGS, STRUCTURES, PARKING LOTS, AND OTHER IMPERVIOUS SURFACES OUTSIDE THE 100-YEAR FLOODPLAIN~~Incentives for Relocating Structures, Parking Lots, and other Impervious Surfaces Outside of the 100-Year Floodplain~~

Existing buildings and structures, parking lots, and other impervious surface areas that are removed from the 100-year Floodplain will qualify for the benefits in "a," and "b," below. Additionally, new ~~d~~Development is also eligible for the benefits in "a," and "b," below, in areas of the 100-year Floodplain where such ~~d~~Development is allowed, including identified portions of the Willamette River, Mary's River, Millrace Floodplain, and Partially Protected local Stream areas.

4.5.70.01~~a.~~ - Allowed Intensification -

a~~1~~. Residentially Zoned Properties - Development or redevelopment of a residentially zoned property, or of a group of contiguous residentially zoned properties, may transfer density from portions of the site within the ~~0.2-ft.~~ Floodway Fringe to portions of the site outside of the ~~0.2- ft.~~ Floodway Fringe to the extent allowed by use of the ~~d~~Development standards in the next most intensive ~~d~~Development zone. However, this intensification is only allowed provided that, in resultant ~~d~~Development, no buildings, structures or parking areas are located within the ~~0.2-ft.~~ Floodway Fringe portion of the site.

b~~2~~. Nonresidentially Zoned Properties for which at Least 25 Percent of the Total Site Area is within the 100-year Floodplain -

1.~~a)~~ Allowed building height of the underlying zone may be increased by 10 ft. if all improvements, including buildings and parking areas, are removed from at least 75 percent of the site area within the Floodplain. This is not a cumulative standard and cannot be combined with height exceptions allowed elsewhere in this Code.

2.~~b)~~ Allowed building height of the underlying zone may be increased by 20 ft. if all improvements, including buildings and parking areas, are removed from 100 percent of the site area within the Floodplain. This is not a cumulative standard and cannot be combined with height exceptions allowed elsewhere in this Code.

4.5.70.02~~b.~~ - Reduction of Impervious Surface Area for Development Sites with at Least 50 percent of Their Area within the 100-year Floodplain -

When a ~~d~~Development site has at least 50 percent of its site area within the 100-year Floodplain, the height of buildings and structures may be increased by 10 ft.

above the height normally allowed in the applicable underlying ~~d~~Development zone if ~~d~~Development or redevelopment of the site results in pervious surface area for at least 50 percent of the entire ~~d~~Development site. Gravel, paving, concrete, buildings, and structures are all impervious. This is not a cumulative standard and cannot be combined with height exceptions allowed elsewhere in this Code.

Section 4.5.8~~50.06~~ - STANDARDS IN THE 0.2-FT. FLOODWAY~~Standards in the 0.2-ft. Floodway~~ -

4.5.80.01~~a.~~ - Encroachments -

Except as provided in Section 4.5.80.05, n~~N~~o encroachments are allowed within the 0.2-ft. Floodway, with the exception of bridges, infrastructure, utilities, or Water-dependent Uses, for which it may be demonstrated, through hydrologic and hydraulic analyses certified by a registered professional civil engineer and performed in accordance with standard engineering practices, that the proposed encroachment would not result in any increase in flood levels within the community during the Base Flood discharge. Encroachments include fill, N~~n~~ew C~~c~~onstruction, fences, Substantial Improvements, except as provided in Section 4.5.80.03.c, and other ~~d~~Development. Development within the 0.2-ft. Floodway shall comply with all applicable state and federal requirements. Construction of these facilities must be shown to cause minimal harm to the Properly Functioning Condition of the stream. These improvements shall be subject to the City's Engineering Design Standards. *[44 CFR 60.3(d)(3) & Model Ordinance Section V-B(1)]*

4.5.80.02~~b.~~ - Watercourse ~~Alterations~~ Relocations -

Watercourse relocation~~alteration~~ by artificial means is prohibited, ~~with~~ except~~ions only~~ for emergency management purposes, the realignment of Dunawi Creek back to its natural alignment as allowed by the note on the Comprehensive Plan Map, or as mandated by state or federal actions that supercede local authority. For riverine situations, ~~prior to the alteration or relocation of a Watercourse,~~ the applicant who is authorized for such ~~an alteration~~a relocation must notify the Oregon Department of State Lands (DSL) and the Oregon Department of Land Conservation and Development, and submit copies of such notification to the Floodplain Administrator or designee~~City Engineer~~, prior to the relocation of a Watercourse. The applicant is required to submit copies of said notification to those adjacent communities that the Floodplain Administrator or designee~~City Engineer~~ determines should receive such notification. The applicant shall submit to the Floodplain Administrator or designee~~City Engineer~~ certification provided by a registered professional engineer, assuring that the flood carrying capacity of ~~an altered or~~a relocated Watercourse can and will be maintained. *[44 CFR 60.3(b)(6 & 7) & Model Ordinance Section V-R(1-4)]*

4.5.80.03~~c.~~ - Limitations and Exceptions to Activities in the 0.2-ft. Floodway -

In addition to the requirements of the underlying zone, the limitations and exceptions in "a~~1~~," through "c~~3~~," below, and in Sections 4.5.80.04 and 4.5.80.05 shall apply to activities within the 0.2-ft. Floodway. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

a~~1~~. Removal of Vegetation - Removal of vegetation from the 0.2-ft. Floodway is prohibited, except for the following purposes, as approved by the Floodplain Administrator or designee~~City Engineer~~:

1.~~a)~~ Stream restoration and enhancement programs;

2.~~b)~~ Removal of Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary in conjunction with vegetation removal, non-rip-rap erosion control measures shall be utilized;

3.~~c)~~ For the ~~d~~Development of Water-related or Water-dependent Uses, provided they are designed and constructed to minimize impact on the existing Riparian Vegetation;

4.~~d)~~ Removal of emergent in-channel vegetation and debris likely to cause flooding events that result in structural damage;

5.~~e)~~ Mowing/cutting of vegetation in a 20-ft. perimeter around buildings and structures for fire hazard prevention;

6.~~f)~~ Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides, or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations and is also subject to the restrictions set forth in the Corvallis Municipal Code; ~~and~~

7.~~g)~~ Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List~~.~~; and

8. For maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines.

b~~2~~. Maintenance within the 0.2-ft. Floodway -

1.~~a)~~ The limitations imposed by this Section do not preclude the routine maintenance of existing buildings and structures, nor the routine maintenance, repair, and replacement of infrastructure in the 0.2-ft. Floodway.

2.~~b)~~ Maintenance of lawns, non-native riparian planted vegetation, and landscaping shall be kept to a minimum. Additionally, the application of herbicides or other pesticides, and the application of synthetic fertilizers is subject to applicable state and federal regulations and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code;

3.~~c)~~ Where replanting is done, native species shall be used, with the exception of continuing agricultural uses, as specified in Section 4.5.80.03.a.6~~4.5.50.07.a.6~~;

4.~~d)~~ Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions;

5.~~e)~~ Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species. However, no trees shall be planted within utility easements; ~~and~~

6.~~f)~~ Disposal of yard waste or other organic materials is prohibited within the Top-of-bank boundary of any Stream, and is regulated by restrictions in the Corvallis Municipal Code~~.~~; and

7. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines.

c~~3~~. Existing Buildings and Structures Constructed Prior to December 4, 1984 - Existing buildings and structures that were constructed prior to December 4, 1984, and are located in the area between the 1.0-ft. Floodway and the 0.2-ft. Floodway shall not be considered Nonconforming Structures for the purposes of this Chapter. Additionally, Substantial Improvement or replacement within the same footprint is permitted. Such replacements shall

comply with the mandatory construction standards in Sections 4.5.100.02, 4.5.100.03, ~~4.5.50.08.b~~ and 4.5.110~~4.5.50.08.c~~.

4.5.80.04 - Placement of Fill within the 0.2-ft. Floodway -

Any fill allowed to be placed within the 0.2-ft. Floodway, per Sections 2.11.40, 4.5.80.01, or 4.5.80.05, shall be designed to be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour. This standard shall not be varied. *[Model Ordinance Section V-B(2)]*

4.5.80.05 - Exception to the 0.2-ft. Floodway "No Rise" Standard -

Notwithstanding Section 4.5.80.01, an increase in the Base Flood Elevation within the 0.2-ft. Floodway may be permitted in exceptional circumstances, if the Floodplain Administrator or designee approves the exceptional circumstances and if the applicant obtains approval of a Conditional Letter of Map Revision (CLOMR) by the Federal Emergency Management Agency. An applicant must strictly adhere to the procedures for obtaining a CLOMR, as described in Section 4.5.50.04, and provide copies of a valid CLOMR to the Floodplain Administrator or designee prior to receiving approval of a local land use request that will result in any increase in Base Flood Elevation within the 0.2-ft. Floodway. *[44 CFR 60.3(c)(13) & (d)(4) & 65.3 & Model Ordinance Sections V-B(3 & 5), V-C(2), & V-Q]*

Section 4.5.9~~50.07~~ - STANDARDS IN HIGH PROTECTION FLOODWAY FRINGE AREAS~~Standards in High Protection Floodway Fringe Areas~~

The following standards shall apply to activities and ~~d~~Development in High Protection Floodway Fringe areas, as identified on the Natural Hazards Map. Generally, these areas contain the 100-year Floodplain of local Streams, but not the portions of the Millrace and Willamette and Mary's River 100-year Floodplains within the City Limits boundary, as of December 31, 2004. Additionally, Special Flood Hazard Areas mapped after December 31, 2004, shall all be designated High Protection Floodway Fringe and, once annexed, shall be subject to the standards of this chapter and Chapter 2.11 - Floodplain Development Permit.*[This change echos the findings in both the Natural Features Project's ESEE Analysis and City Council formal findings in the adopting ordinances. The addition of this statement makes this existing fact clear in the Code.]*

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within the High Protection Floodway Fringe. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

4.5.90.01 - ~~a.~~Removal of Vegetation -

Removal of vegetation from High Protection Floodway Fringe areas is prohibited, except for the following purposes, as approved by the Floodplain Administrator or designee~~City Engineer~~:

a~~1~~. Stream restoration and enhancement programs;

b~~2~~. Removal of Invasive and/or Noxious Vegetation as defined in Chapter 1.6 - Definitions. If necessary in conjunction with vegetation removal, non-rip-rap erosion control measures shall be utilized;

c~~3~~. For the ~~d~~Development of Water-related or Water-dependent Uses, provided they are designed and constructed to minimize impact on the existing Riparian Vegetation;

d~~4~~. Removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage;

e~~5~~. Mowing/cutting of vegetation in a 20-ft. perimeter around buildings and structures for fire hazard prevention;

f~~6~~. Continuation of agricultural activities occurring on a property prior to December 31, 2004, such as grazing livestock, growing crops, etc. However, the use of herbicides, or other pesticides, the application of synthetic fertilizers, and the storage of toxic materials in these areas is subject to applicable state and federal regulations,and is also subject to the restrictions set forth in the Corvallis Municipal Code;

g~~7~~. Maintenance and protection of the function of City utilities and transportation facilities located within Floodway Fringe areas; ~~and~~

h~~8~~. Removal of Hazardous Trees - Requests for removal of Hazardous Trees, except in emergency circumstances, shall be reviewed by the City Urban Forester (or another qualified arborist) and approved, conditionally approved, or denied by the Community Development Director. Any trees removed shall be replaced by like native species or alternative approved native species listed on the City of Corvallis Native Plant List~~.~~;

i. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines; and

j. Removal of vegetation and maintenance within areas allowed to be developed per the Code's Minimum Assurance Development Area (MADA) provisions.

4.5.90.02 -~~b.~~Building, Paving, and Grading Activities -

Within High Protection Floodway Fringe areas, the placement of buildings and structures or impervious surfaces, as well as grading, excavation, and the placement of fill, is prohibited except as provided in Section 2.11.40 and as stated below. Exceptions to the Floodway Fringe restrictions may be made for the purposes identified in items "a~~1~~," through "g~~7~~," of this Section, provided they are designed and constructed to minimize adverse impacts to Stormwater and Floodplain Functions within the Floodway Fringe, comply with the mandatory construction standards in 4.5.100 ~~4.5.50.08.b~~ and 4.5.110~~4.5.50.08.c~~, and, unless permitted in accordance with Section 4.5.50.04, result in no increase in Base Flood Elevation. *[Reiterates current Code requirements]*

a~~1~~. Replacement or Relocation of Existing Buildings and Other Structures - Replacement or relocation of existing buildings and/or other structures, either within the ~~building's~~ original ~~building~~ footprint, or with the same or reduced square footage area elsewhere in the Floodplain portion of the site. A relocation of an existing building and/or other structure within the same square footage area, but located elsewhere within the Floodplain portion of the site, is only allowed if the relocated building and/or other structure enhances Stormwater and Floodplain Function. The relocation shall be considered to enhance Stormwater and Floodplain Function if it furthers any of the following goals without worsening any other goal:

1.~~a)~~ Replaces standard construction with flow-through construction;

2.~~b)~~ Moves the structure or paved area to a higher elevation;

3.~~c)~~ Moves the structure or paved area further from the Top-of-bank of the adjacent Watercourse;

4.~~d)~~ Reduces the amount of impervious surface area in the Floodway Fringe;

5.~~e)~~ Does not negatively impact non-noxious Riparian Vegetation. Invasive and/or Noxious Vegetation is defined in Chapter 1.6 - Definitions; and/or

6.~~f)~~ Maintains or reduces the volume of floodwater displacement.

["b," below was redundant in many ways, so it was combined with "a."]

~~**b2. Replacement or Relocation of Existing Structures Other than Buildings -** Replacement or relocation of structures other than buildings either within the original footprint, or with the same or reduced square footage elsewhere within the Floodplain portion of the site. A relocation of an existing structure other than a building, within the same square footage area, but located~~

~~elsewhere within the Floodplain portion of the site, is only allowed if the relocation enhances Stormwater and Floodplain Function. The relocation shall be considered to enhance Stormwater and Floodplain Function if it furthers any of the following goals without worsening another goal:~~

~~1.a) Moves the paved area to a higher elevation;~~

~~2.b) Moves the paved area farther from the Top-of-bank of the adjacent Watercourse;~~

~~3.c) Reduces the amount of impervious surface area in the Floodway Fringe; and~~

~~4.d) Does not negatively impact non-noxious Riparian Vegetation. Invasive and/or Noxious Vegetation is defined in Chapter 1.6.~~

b~~3~~. Additions to existing buildings and structures that either:

1.~~a)~~ Fall below the threshold of Substantial Improvement as defined in Chapter 1.6 - Definitions; or

2.~~b)~~ Will not result in the filling of additional Floodway Fringe area, such as a second story addition or Flow-through Design construction;

c~~4~~. Location, maintenance, repair, and replacement of infrastructure, and construction of streets, utilities, bridges, bicycle, and pedestrian facilities. Location and construction of such facilities within High Protection Floodway Fringe areas must be deemed necessary to maintain a functional system by the City Engineer. This Code, City Transportation and Utility Master Plans, and other adopted City plans shall guide this determination. The design standards of Chapter 4.0 - Improvements Required with Development shall be applied to minimize the impact to the Floodway Fringe area;

d~~5~~. Redevelopment of utility operations existing as of December 31, 2004, is also permitted. Required riparian easement areas shall be re-vegetated consistent with Section 4.13.50.d.1 and Section 4.13.50.d.2 of Chapter 4.13 - Riparian Corridor and Wetland Provisions;

e~~6~~. Development of Water-related and Water-dependent Uses, including associated drainage facilities, water and sewer utilities, stormwater detention and retention facilities, flood control projects, and drainage pumps. These improvements shall be subject to the City's Engineering Design Standards;

f~~7~~. Erosion control or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers, or other state or federal regulatory agency with jurisdiction in this

area. Erosion control or flood control measures shall either utilize bio-engineering methods other than rip-rap, or shall utilize rip-rap only to address an imminent hazard to a structure built prior to December 31, 2004. If utilized, the rip-rap installation shall be designed by a Professional Engineer Licensed by the State of Oregon and approved by the Oregon Department of Fish and Wildlife; and

g~~8~~**.** Development associated with a Minimum Assured Development Area that would be allowed in accordance with Chapter 4.11 - Minimum Assured Development Area (MADA).

4.5.90.03 -~~c.~~ Subdivisions, Land Partitions, and Property Line Adjustments -

For properties with Natural Resources or Natural Hazards subject to Chapter 4.5 - Floodplain~~Natural Hazard and Hillside Development~~ Provisions, Chapter 4.12 - Significant Vegetation Protection Provisions, ~~or~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, or Chapter 4.14 - Landslide Hazard and Hillside Development Provisions, no Subdivision, Partition, or Lot Line Adjustment shall create new lots or parcels unless each new and remaining lot or parcel contains:

a~~1~~**.** An area unconstrained by Natural Resources or Natural Hazards;

b~~2~~**.** An area that includes Formerly Constrained Areas; or

c~~3~~**.** Contains an area that includes the areas in "a,"~~c.1.~~ and "b,"~~c.2.~~ above;

and that area is equal to or greater than the Minimum Assured Development Area for the zone or zones in which the ~~d~~Development site falls.

Exceptions to this requirement are lots created for public park purposes and privately- or publicly-owned lots completely contained within land zoned Conservation-Open Space. New Subdivisions and Partitions may contain common open space tracts for the purpose of protecting Natural Resources and/or avoiding Natural Hazards.

4.5.90.04 -~~c.~~ Maintenance within Floodway Fringe Areas -

The limitations imposed by this Section do not preclude the routine maintenance of allowed or pre-existing buildings, structures, infrastructure, and landscaped areas.

a~~1~~**.** Maintenance of lawns, non-native riparian planted vegetation and landscaping shall not expand lawn areas or remove or damage any non-hazardous tree. A lawn area is defined as vegetated area mowed to an 18-in. or less height;

b~~2~~**.** The application of herbicides or other pesticides, and the application of synthetic fertilizers are subject to applicable state and federal regulations; and developed properties shall be subject to the restrictions set forth in the Corvallis Municipal Code;

c~~3~~**.** Where replanting is done, native species shall be used, with the exception of continuing agricultural uses, as specified in Section 4.5.90.01.f ~~4.5.50.07.a.6~~;

d~~4~~**.** Maintenance pruning of existing trees shall be kept to a minimum and shall be in accordance with the American National Standards Institute (ANSI) A300 standards for Tree Care Operations. Under no circumstances shall the maintenance pruning be so severe that it compromises the tree's health, longevity, and resource functions;

e~~5~~**.** Vegetation within utility easements shall be kept in a natural state and replanted when necessary with native plant species. However, no trees shall be planted within utility easements; ~~and~~

f~~6~~**.** Disposal of yard waste or other organic materials is prohibited within 25 ft. of the Top-of-bank boundary of any Stream, and is regulated by restrictions in the Corvallis Municipal Code~~.~~; and

g. Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines.

4.5.90.05 - Use of Minimum Assured Development Area (MADA) Provisions in the 100-year Floodway Fringe -

a. **MADA Provisions Cannot be Used to Encroach into the 0.2-ft. Floodway -** While Section 4.5.80 does allow for some very limited types of activities into the 0.2-ft. Floodway, encroachments for the specific purpose of achieving a Minimum Assured Development Area per Chapter 4.11 - Minimum Assured Development Area (MADA) are prohibited in the 0.2-ft. Floodway. This prohibition is consistent with Section 4.11.50.05.

b. **Floodway Fringe Development Pursuant to MADA Provisions Requires Adherence to Partial Protection Floodplain Provisions -** In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.100 - Standards in Partial Protection Floodway Fringe.

Section 4.5.1050~~.08~~ - STANDARDS IN PARTIAL PROTECTION FLOODWAY FRINGE AREAS~~Standards in Partial Protection Floodway Fringe Areas~~

The following standards shall apply to activities and ~~d~~Development in Partial Protection Floodway Fringe areas, as identified on the Natural Hazards Map. These areas contain the portions of the Millrace and Willamette and Mary's River 100-year Floodplain within the City Limits boundary, as of December 31, 2004; and specific portions of local Streams as noted on the Riparian Corridors and Wetlands Map.

In addition to the requirements of the underlying zone, the following limitations and exceptions shall apply to activities within the Partial Protection Floodway Fringe. Where applicable state or federal regulations provide greater restrictions, such regulations shall apply. All necessary local, state, and federal approvals shall be secured prior to the commencement of earth movement or construction in these areas.

Except as provided in Sections 4.5.100.01 and 2.11.40, the placement of fill is prohibited within Partial Protection Floodway Fringe areas. *[This change clarifies the Code to make this existing regulation abundantly clear.]*

4.5.100.01 - ~~a.~~Volumetric Exchange

To compensate for the deposition of fill materials or construction of flood-proofed buildings within any portion of the 100-y~~ea~~r. Floodplain, an equal amount of material shall be removed from the same property or ~~d~~Development site to ensure that the available flood volume of the 100-y~~ea~~r. Floodplain is not reduced. Unless permitted in accordance with Section 4.5.50.04, no increase in Base Flood Elevation shall be permitted. In addition, the following provisions shall apply: *[Reiterates current Code requirements. Also, the change in this opening paragraph take these same existing regulations (current Code Section 4.5.50.08.a.6, etc.) and moves them up front]*

a~~1~~. Material removed from the site shall not be taken from Significant Natural Resource areas as mapped on the Corvallis Significant Vegetation Map and Riparian Corridors and Wetlands Map, and shall be removed consistent with all requirements of this Code and other applicable City policies;

b~~2~~. Areas of fill and excavation shall be designed to accommodate floodwater flows and shall not create barriers to the flow of floodwater. Proposals to alter topography in the Floodplain must demonstrate that they will not result in alteration of hydrology or flow regimes that would cause erosion, unwanted ponding, or other problems;

c~~3~~. Volumetric exchange will not be required of buildings within the Floodway Fringe constructed with Flow-through Design, but will be required of flood-proofed buildings and structures within the Floodway Fringe;

d~~4~~**.** Dikes are prohibited in these areas; and

e~~5~~**.** The volume of a stormwater detention facility necessary to accommodate the designed-for storm event shall not count as an element of volumetric exchange~~; and~~.

~~6. Provisions allowing the use of volumetric exchange shall apply only to areas within the Floodway Fringes of the Millrace and the Willamette and Marys Rivers.~~ *[Volumetric exchange is a legitimate form of mitigation to address impacts to Floodplains in Partial Protection Floodplain areas. The Partial Protection Floodplain areas include primarily the Millrace, and the Willamette and Marys River areas. However, there are also Partial Protection Floodplain areas in some already urbanized sections of streams, such as portions of Dixon Creek and urbanized sections of Dunawi Creek, etc. Since properties along these already urbanized sections of streams face challenges because the properties are typically in small lot situations, it is recommended that this volumetric exchange tool be allowed in all Partial Protection Floodplain areas.]*

4.5.100.02 -~~b.~~ Parking Limitation - to Reduce Impervious Surface Area in the Floodplain -

a~~1~~**.** Where permitted, no expansion, redevelopment, or ~~d~~Development of a parking lot containing four or more parking spaces within any portion of the Floodway Fringe shall contain more than the minimum amount of parking that would be required per Chapter 4.1 - Parking, Loading, and Access Requirements, unless "1~~a~~," or "2~~b~~," below, is true. Parking lots within the Floodway Fringe may be reduced to 80 percent of the minimum parking required by Chapter 4.1. To achieve greater than minimum parking in the Floodway Fringe, parking area shall:

1.~~a)~~ Be constructed of pervious materials, such as grass-crete; or

2.~~b)~~ Be contained in a multi-story structured parking facility with at least 50 percent of the provided parking located above ground level and utilizing Flow-through Design. If this option is used, the parking lot may contain up to 130 percent of the required parking amount.

b~~2~~**.** Compact Spaces - Where parking lots are permitted in the Floodway Fringe:

1.~~a)~~ 40 percent of the parking spaces within new and redeveloped parking lots shall be compact spaces; and

2.~~b)~~ If existing parking lots within the Floodway Fringe are permitted to expand, per the provisions of this Chapter, all additional parking spaces created in the expanded parking lot shall be compact spaces,

until the 40 percent threshold in "1~~a~~," above, is reached for the overall parking lot.

4.5.100.03 - Adherence to Sections 4.5.110, 4.5.120, and 4.5.90.05 -

a. Development is required to adhere to the Construction standards in Section 4.5.110 and the Subdivision, Land Partition, and Property Line Adjustment standards in Section 4.5.120.

b. **Use of MADA -** In cases where encroachment into the Floodway Fringe is allowed per the Minimum Assured Development Area provisions in Chapter 4.11 - Minimum Assured Development Area (MADA), all such Development shall comply with Section 4.5.90.05.

Section 4.5.110 -~~c.~~ CONSTRUCTION STANDARDS WITHIN THE 100-YEAR FLOODPLAIN~~Construction Standards within the 100-year Floodplain~~ -

~~1. -~~ **General Standards for All Construction -** Development within the Floodway Fringe (Federal Flood Zones A, AH, A1-A30, AE, AO, and A99 on the Flood Insurance Rate Map), including residential and nonresidential buildings and structures and the public and private facilities serving these buildings and structures, shall adhere to the following standards so as to minimize damage from flooding. Unless permitted in accordance with Section 4.5.50.04, no increase in Base Flood Elevation shall be permitted. Although other types of construction are allowed by this Code, Flow-through Designs are preferable. These standards in 4.5.110.01~~"a,"~~ through 4.5.110.05~~"c~~e~~,"~~ below, shall apply to all construction within the Floodway Fringe. In addition, the standards in ~~"2,"~~ Section 4.5.110.06 through 4.5.110.14, ~~"5,"~~ below apply, as applicable. *[Reiterates current Code requirements]*

4.5.110.01 - ~~)~~ All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334, as amended. If obtaining such permits is a Condition of Approval for a land use application, such Condition of Approval shall be satisfied prior to issuance of any construction permit.

4.5.110.02 - ~~)~~ All Land Division and Building Permit applications, including the placement of mobile and Manufactured Dwellings within ~~special~~ Federal F~~f~~lood ~~hazard~~ Z~~z~~ones A, A1-A30, AE, AH, AO, and A99, shall be reviewed for conformance with these standards. Land Division and mobile or Manufactured Dwelling Facility proposals shall:

a.~~1)~~ Be consistent with the need to minimize flood damage;

b.~~2)~~ Locate and construct utilities such as sewer, gas, electrical, and water systems to minimize or eliminate flood damage;

c.~~3)~~ Provide adequate drainage to reduce exposure to flood hazards;

d.~~4)~~ Design new and replacement water systems within flood prone areas to minimize or eliminate infiltration of flood waters into the systems; and

e.~~5)~~ Design new and replacement sanitary sewer systems within flood prone areas to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters. On-site waste disposal systems are not allowed.

4.5.110.03~~c.~~ - Flood Protection Construction Standards -

a.~~1)~~ All N~~n~~ew C~~c~~onstruction and Substantial Improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from Hydrodynamic and Hydrostatic Loads, including the effects of buoyancy; *[Model Ordinance Section II - Definitions]*

b.~~2)~~ All mobile and Manufactured Dwellings shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors as approved by the Building Official. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces; and *[Model Ordinance Section V-F(1 &2)]*

c.~~3)~~ All building materials not elevated one ft. above Base Flood E~~e~~levation shall be constructed with materials that resist, and methods that minimize, flood damages.

4.5.110.04 - Use of Fill within the Floodway Fringe - Any fill allowed to be placed within the Floodway Fringe shall be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour. This standard shall not be varied.*[Model Ordinance Section V-B(2)]*

4.5.110.05 - Below Grade Crawlspaces - Below-grade Crawlspaces are allowed provided they conform to the following standards as found in FEMA Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*:

a. The building shall be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in "b," below. Because of hydrodynamic loads, Crawlspace construction is not allowed in areas with flood velocities greater than five ft. per second unless the design is reviewed by a qualified design professional, such as a registered architect or licensed professional engineer. Other types of foundations are recommended for these areas;

b. The Crawlspace is an enclosed area below the Base Flood Elevation (BFE) and, as such, shall have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening shall be no more than one ft. above the lowest adjacent exterior grade;

c. Portions of the building below the Base Flood Elevation (BFE) must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the Crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE;

d. Any building utility systems within the Crawlspace shall be elevated above Base Flood Elevation (BFE) or designed so that flood waters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, shall either be placed above the BFE or sealed from flood waters;

e. The interior grade of a Crawlspace below the Base Flood Elevation (BFE) shall not be more than two ft. below the lowest adjacent exterior grade;

f. The height of the below-grade Crawlspace, measured from the interior grade of the Crawlspace to the top of the Crawlspace foundation wall shall not exceed four ft. at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and Building Code requirements for Special Flood Hazard Areas;

g. There shall be an adequate drainage system that removes flood waters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity or mechanical means; and

h. The velocity of flood waters at the site should not exceed five ft. per second for any Crawlspace. For velocities in excess of five ft. per second, other foundation types should be used.

4.5.110.06~~2.~~ **Standards for Recreational Vehicles -**

a.~~)~~ For the purposes of this Section, Recreational Vehicle is defined as a vehicle which includes all the following characteristics:

1.~~)~~ Built on a single chassis;

2.~~)~~ 400 sq. ft. or less in size when measured at the largest horizontal projection;

3.~~)~~ Designed to be self-propelled or permanently towable by a light duty truck; and

4.~~)~~ Designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

b.~~)~~ All Recreational Vehicles placed on sites within Federal Flood Zones A, AH, A1-A30, AE, AO, and A99 shall either:*[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(1-3)]*

1.~~)~~ Be on the site for fewer than 180 consecutive days;*[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(1)]*

2.~~)~~ Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect-type utilities and security devices, and have no permanently attached structures or addition; or *[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(2)]*

3.~~)~~ Meet all standards of Section ~~60.3 (b) (1) of the National Flood Insurance Program Regulations and the elevation and anchoring requirements for Manufactured Dwellings in Paragraph (c)(6) of Section 60.3~~ 4.5.110.03.*[44 CFR 60.3(c)(14) & (e)(9) & Model Ordinance Section V-I(3)]*

4.5.110.07 - ~~3.~~**Residential Construction -**

a.~~)~~ New Ceonstruction and Substantial Improvement (as defined in Chapter 1.6 - Definitions) of any residential structure, including mobile and Manufactured

Dwellings, shall have the Lowest Floor elevated to a minimum of one ft. above Base Flood E~~e~~levation. In AO Federal Flood Zones, the Lowest Floor shall be elevated a minimum of one ft. above the flood Depth Number or, in areas where the Depth Number is unknown, the Lowest Floor shall be elevated a minimum of three ft. above the Highest Adjacent Grade. Lowest Floor includes basements and Habitable attached garages, and electrical (except utility meters), heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork). *See definition for Lowest Floor in Section 1.6.40.[44 CFR 60.3(c)(7 & 8) & Model Ordinance Section V-D(3)(b)]*

b.~~)~~ Accessory buildings and structures less than 200 sq. ft., and fully enclosed nonHabitable areas below the Lowest Floor that are subject to flooding are prohibited, unless designed to automatically equalize Hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. These accessory buildings and structures and fully enclosed nonHabitable areas include nonHabitable attached or detached garages, provided they meet the description of an "unfinished or flood-resistant enclosure" in the Section 1.6.40 definition for Lowest Floor. Designs for meeting these requirements shall meet standards outlined in the adopted Oregon Structural Specialty Code and shall meet or exceed the following minimum criteria:

1.~~)~~ A minimum of two openings having a total net area of not less than one sq. in. for every sq. ft. of enclosed area subject to flooding shall be provided;

2.~~)~~ The bottom of all openings shall be no higher than one ft. above grade; and

3.~~)~~ Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

4.5.110.08~~4.~~ **- Nonresidential Construction -**

a.~~)~~ New C~~c~~onstruction and Substantial Improvement of any commercial, industrial, or other nonresidential structure shall either have the Lowest Floor elevated a minimum of one ft. above the level of the Base Flood E~~e~~levation, or accomplish the alternative approach in "1," through "3," below. Lowest Floor includes basements and Habitable attached garages, and electrical (except utility meters), heating, ventilation, plumbing, and air conditioning equipment and other service facilities (including ductwork). *See definition for Lowest Floor in Section 1.6.40.* The alternative approach includes:

1.) Flood-proofing the Lowest Floor together with attendant utilities and sanitary facilities, so that the structure is watertight a minimum of one ft. above the Base Flood level;

2.) Having the structural components of the Lowest Floor capable of resisting Hydrostatic and Hydrodynamic Loads and effects of buoyancy; and

3.) Having the alternative design certified by a registered professional engineer or architect, stating that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection, based on his/her dDevelopment and/or review of the structural design, specifications, and plans.

b.) Designs for meeting the requirements in "a," above, shall meet standards outlined in the adopted Oregon Structural Specialty Code.

1.) Nonresidential buildings and structures that are elevated and not flood-proofed must have structural components capable of resisting Hydrostatic and Hydrodynamic Loads and effects of buoyancy, for space below the Lowest Floor.

2.) Applicants proposing to flood-proof nonresidential buildings shall be notified that the flood insurance premiums shall be based on rates for buildings and structures with a Lowest Floor that is one ft. below the flood-proofed level.

4.5.110.09 - Critical Facilities -

Construction of new Critical Facilities, as defined in Section 1.6.40, shall be, to the maximum extent possible, located outside the limits of Special Flood Hazard Areas. Construction of new Critical Facilities shall be permissible within the Special Flood Hazard Area if no feasible alternative site is available. Critical Facilities constructed within Special Flood Hazard Areas shall have the Lowest Floor elevated three feet above Base Flood Elevation (or Depth Number in AO Federal Flood Zones). Access to and from the Critical Facility shall also, to the maximum extent possible, be protected to the height utilized above within the corresponding Special Flood Hazard Area(s). Any grade transition necessary to achieve the access protection requirement shall be achieved outside of the corresponding Special Flood Hazard Area(s). Dry floodproofing and sealing measures must be used to ensure that toxic substances or priority organic pollutants, as defined by the Oregon Department of Environmental Quality, will not be displaced by or released into floodwaters. The Floodplain Administrator or designee shall make the determination as to whether or not the Critical Facility's siting and access have achieved this provision's standards of "to the maximum extent possible." *[Model Ordinance Section V-J]*

Some types of facilities may be critical to a community, but require location within or partially within Special Flood Hazard Areas because of the nature of the facilities. The Taylor Water Treatment plant along the Willamette River is an example of such a facility. It is pulling water from the Willamette River. Because of this fact, these types of facilities have purposefully been excluded from the definition of Critical Facility in Section 1.6.40.

4.5.110.10 - Storage Tanks -

a. Underground tanks in Special Flood Hazard Areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood. *[Model Ordinance Section V-K(1)]*

b. Above-ground tanks in Special Flood Hazard Areas shall be:*[Model Ordinance Section V-K(2)]*

1. Attached to and elevated to or above the Base Flood Elevation (or Depth Number in AO Federal Flood Zones) and attached to a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood; or be

2. Anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood.

c. Tank inlets, fill openings, outlets and vents shall be: *[Model Ordinance Section V-K(3)]*

1. A minimum of 2 ft. above Base Flood Elevation (BFE) or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tank during conditions of the design flood; and

2. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the design flood.

4.5.110.11 - On-site Sewage Systems -

a. Soil absorption systems shall be located outside of Special Flood Hazard Areas. Where suitable soil absorption sites outside of Special Flood Hazard Areas are not available, the soil absorption site is permitted to be located within an Special Flood Hazard Area, provided the Floodplain Administrator or designee finds that it is located to minimize the effects of inundation under

conditions of the Base Flood; and *[International Private Sewage Disposal Code, Chapter 3 & Model Ordinance Section V-L(1)]*

b. Mound systems are prohibited in Special Flood Hazard Areas.*[International Private Sewage Disposal Code, Chapter 3 & Model Ordinance Section V-L(2)]*

4.5.110.12 - Fences and Walls -

Unless exempt per Section 2.11.40.b, a Floodplain Development Permit shall be obtained for fences and walls, and the fences and walls shall comply with all of the standards in "a," and "b," below:

a. **Applicability -** These provisions apply when fences and walls are not exempt per Section 2.11.40.b, and at least one of the following is true:

1. The velocity of the flood waters where the fence or wall is proposed is equal to or greater than 5 ft. per second. This velocity information shall be obtained from one of the two following sources:

   a) The Flood Insurance Study for Benton County and Incorporated Areas, dated _____, 2010; or

   b) For sites where no FEMA Flood Insurance Study is available, an independent Floodplain study approved by the Floodplain Administrator or designee and meeting all the requirements as outlined in Section 4.5.50.03.p; or

2. The velocity of flood waters information specified in "1," above, is not available from one of the two sources in Section 4.5.110.12.a.1. In these instances the velocity of flood waters shall be assumed to be greater than 5 ft. per second.

The purpose of the Floodplain Development Permit for fences and walls in Floodplain areas with unknown flood water velocities or velocities at least 5 ft. per second, even where the fences and walls meet the design parameters in Section 2.11.40.b.2, is to ensure proper documentation and consideration of Floodplain activities for the benefit of the Federal Emergency Management Agency (FEMA) and the Floodplain Administrator or designee.

b. Fencing shall fully comply with Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit.

Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit
(Those Fences and Walls Meeting Section 4.5.110.12.a)

	Fencing or Walls Allowed?			
Fence or Wall Type	**Floodway Fringe**	**Floodway**	**Federal Flood Zones AH and AO**	
A	Yes	Yes, provided Section 4.5.80.01 is met.	Yes	
B	Yes	Yes, provided Section 4.5.80.01 is met & there is limited cross channel fencing.	Yes	
C & D	Yes, if fence is completely open below the Base Flood Elevation	No, unless shown, using FEMA-approved engineering/ modeling standards, to cause no rise in Base Flood Elevation.	AH Federal Flood Zone - Yes, if fence is completely open below the Base Flood Elevation.	AO Federal Flood Zone - Yes, if fence is completely open below the Flood Depth Number where Base Flood Elevation not known.
E & F	Yes, both of the following are met: **1.** An opening or a flap is provided in the areas at or below the Base Flood Elevation at least once every three fence panels or 24 ft., whichever is less. Fences less than 24 ft. in length shall have at least one flap or opening in the areas at or below Base Flood Elevation.The minimum dimensions of the opening or flap shall not be less than 12 in. x 12 or 8 in. x 18 in. In areas of the Floodway Fringe where Base Flood Elevation data is not available, the opening or flap shall be placed within one ft. of the existing grade along the fence alignment; **2.** Openings shall not include any screening of any size or type, except for flaps that are capable of self-release and open to the full dimensions when under pressure of no greater than 20 pounds per sq. ft.	No, unless shown, using FEMA-approved engineering/modeling standards, to cause no rise in Base Flood Elevation.	Yes, both of the following are met: **1.** An opening or a flap is provided in the areas at or below the Base Flood Elevation in AH Federal Flood Zone and below Flood Depth Number in AO Federal Flood Zone, at least once every three fence panels or 24 ft., whichever is less. Fences less than 24 ft. in length shall have at least one flap or opening in the areas at or below Base Flood Elevation.The minimum dimensions of the opening or flap shall not be less than 12 in. x 12 or 8 in. x 18 in. In areas of the Floodway Fringe where Base Flood Elevation data is not available, the opening or flap shall be placed within one ft. of the existing grade along the fence alignment; **2.** Openings shall not include any screening of any size or type, except for flaps that are capable of self-release and open to the full dimensions when under pressure of no greater than 20 pounds per sq. ft.	

Table 4.5-1 Fencing and Wall Parameters for Fences and Walls that Require a Floodplain Development Permit (Those Fences and Walls Meeting Section 4.5.110.12.a)			
	Fencing or Walls Allowed?		
Fence or Wall Type	**Floodway Fringe**	**Floodway**	**Federal Flood Zones AH and AO**
G	Yes for fence only, provided a licensed engineer provides documentation showing that the fence is designed to collapse under anticipated flood Base Flood conditions. The engineering analysis shall consider debris impact, size of posts, and velocity and depth of flood waters.	No	Yes for fence only, provided a licensed engineer provides documentation showing that the fence is designed to collapse under anticipated flood Base Flood conditions. The engineering analysis shall consider debris impact, size of posts, and velocity and depth of flood waters.

A = Open barb or barbless wire. Open means no more than one horizontal strand per one ft. of height.
B = Open pipe or rail fencing (e.g. corrals). Open means rails occupy less than 10 percent of the fence area and posts are spaced no closer than 8 ft. apart.
C = Other wire, pipe, or rail fencing (e.g. field fence, chicken wire, etc.) which does not meet the requirements of "A," or "B," above.
D = Chain link fencing
E = Continuous Wood Fencing
F = Masonry Walls (excluding retaining walls, as retaining walls are required by Section 4.5.110.12 to meet the same standards as other building, paving, and grading activities)
G = Collapsible Fencing

4.5.110.13 - Temporary Structures, Storage, and Bridges -

A Floodplain Development Permit is required for construction or placement of temporary structures, temporary storage associated with nonresidential uses, and temporary bridges located in Special Flood Hazard Areas: *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(1-3)]*

a. Temporary structures, not including bridges, shall be limited by the Floodplain Administrator or designee as to time of service, with the intent that the time of service is limited to the minimum time necessary to accomplish the temporary activity, per the provisions in "c," below. This time of service shall not exceed 90 days. The Floodplain Administrator or designee is authorized to grant extensions for demonstrated cause; such cause shall reaffirm the temporary nature of the structure. Temporary structures shall be anchored to prevent flotation, collapse, or lateral movement. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(1)]*

b. Temporary storage of fill shall be limited by the Floodplain Administrator or designee as to time of service, with the intent that the time of service is limited to the minimum time necessary to accomplish the temporary activity, per the provisions in "c," below. This time of service shall not exceed 90 days and the amount of temporary fill shall be limited to no more than 50

cubic yards. The Floodplain Administrator or designee is authorized to grant extensions for demonstrated cause; such cause shall reaffirm the temporary nature of the storage. Stored material shall be anchored or contained to prevent flotation or release outside the assigned storage area. Hazardous materials priority persistent pollutants identified by the Oregon Department of Environmental Quality shall not be stored in the 0.2-ft. Floodway. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(2)]*

c. Temporary encroachments, including bridges, in the 0.2-ft. Floodway require approval of a Floodplain Development Permit subject to conditions "1" through "7", below. No CLOMR/LOMR is required[1]. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

1. The Floodplain Development Permit shall stipulate the days and dates the Development will be on site. The Floodplain Administrator or designee shall determine the permissible period of encroachment based on the existing and expected hydrologic conditions of the 0.2-Floodway, as well as the type of and need for the encroachent. The Floodplain Administrator or designee is authorized to grant extensions for demonstrated cause; such cause shall reaffirm the temporary nature of the Development and be based on the hydrologic conditions expected during the period of extension. The Floodplain Administrator or designee is authorized to place limits on the volume of materials placed within the 0.2-ft. Floodway as a temporary encroachment and, when making such a determination, shall consider the existing and expected hydrologic conditions during the period of encroachment, as well as the type of and need for the encroachment;*[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

2. A flood warning plan for the project shall be in place to allow equipment to be evacuated from the site and placed outside the Floodplain prior to inundation by flood waters; *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

3. Placement of equipment in the Floodway shall be restricted to only that equipment which is absolutely necessary for the purposes of the project. All other accessory equipment and temporary structures (i.e.,

[1] No CLOMR/LOMR will be required because there is no need to modify the FIRM due to the temporary condition of the encroachment. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3).]*

construction trailers) shall be restricted from the 0.2-ft. Floodway. Structures should be placed on site so that flood damages are minimized. In instances where the Floodplain Administrator or designee believes that evacuation isn't practical, the Floodplain Administrator or designee is authorized to require anchoring of construction trailers;*[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

4. Temporary changes to the Floodplain under a one percent chance flood event (100-year flood) shall be identified; and *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

5. The applicant shall be notified in writing that they may be liable for any flood damages resulting from the temporary structure. *[FEMA Region X Guidance Memorandum: Temporary Encroachments into the Floodway (October 2009) & Model Ordinance Section V-P(3)]*

4.5.110.14 - Non-conversion of Enclosed Areas Below the Lowest Floor -

To ensure that the areas below the Base Flood Elevation (BFE) continue to be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation without first becoming fully compliant with the provisions of this chapter and Chapter 2.11 - Floodplain Development Permit in effect at the time of conversion, the Floodplain Administrator or designee shall:*[Model Ordinance Section V-S(A-C)]*

a. Determine which applicants for New Construction and/or Substantial Improvements have fully enclosed areas below the Lowest Floor that are 5 ft. or higher; *[Model Ordinance Section V-S(A-C)]*

b. Require the property owner to enter into a "NON-CONVERSION AGREEMENT FOR CONSTRUCTION WITHIN SPECIAL FLOOD HAZARD AREAS" or equivalent with the City of Corvallis. The agreement shall be recorded with Benton County as a deed restriction. The non-conversion agreement shall be reviewed and approved by the Floodplain Administrator or designee; and *[Model Ordinance Section V-S(A-C)]*

c. Have the authority to inspect any area of a structure below the Base Flood Elevation to ensure compliance upon prior notice of at least 72 hours. *[Model Ordinance Section V-S(A-C)]*

Section 4.5.120~~d.~~ - SUBDIVISIONS, LAND PARTITIONS, AND PROPERTY LINE ADJUSTMENTS~~Subdivisions, Land Partitions, and Property Line Adjustments~~ -

Subdivisions, Lot Line Adjustments, and Minor Land Partitions that would create parcels or lots that cannot be developed in conformance with the regulations contained in this Chapter are prohibited, with the exception of lots created for public park purposes. See Section 4.5.90.03.

~~Section 4.5.60 - STANDARDS FOR DEVELOPMENT IN STEEPLY SLOPED AREAS~~

(ENTIRE SECTION MOVED TO BE PART OF A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)

~~Section 4.5.70 - STANDARDS FOR DEVELOPMENT IN LANDSLIDE HAZARD AREAS -~~

(ENTIRE SECTION MOVED TO BE PART OF A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)

~~Section 4.5.80 - HILLSIDE DEVELOPMENT STANDARDS~~

(ENTIRE SECTION MOVED TO BE PART OF A NEW CHAPTER 4.14 - LANDSLIDE HAZARD AND HILLSIDE DEVELOPMENT PROVISIONS)

4.5.13~~9~~0 - MAP REFINEMENTS

4.5.13~~9~~0.01 - Map Refinements Defined -

Map Refinements are adjustments made through professional analyses to refine the actual boundaries of some Natural Resources and Natural Hazards. Map Refinements must be made in accordance with the provisions in Chapter 4.5 - ~~Natural Hazard and Hillside Development~~ Floodplain Provisions, ~~and~~ Chapter 4.13 - Riparian Corridor and Wetland Provisions, and Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. ~~and~~ The Map Refinements governed by this chapter are specifically allowed to determine the location and extent of the:

a. 0.2-ft. Floodway;

b. 1.0-ft. Floodway, in accordance with FEMA regulations; and

c. 100-year Floodplain~~Floodway Fringe~~, in accordance with FEMA regulations;

~~**d.** Landslide Hazard areas;~~

~~**e.** Slopes;~~

~~**f.** Top-of-bank of Streams and rivers;~~

~~**g.** Riparian Corridors, once Top-of-bank is accurately determined; and~~

~~**h.** Wetlands, through delineations approved by the Oregon Department of State Lands.~~

4.5.1390.02 - Map Refinements Provisions -

a. Map Refinement provisions for the 0.2-ft. Floodway, the 1.0-ft. Floodway, and the 100-year Floodplain~~Floodway Fringe, Landslide Hazard areas, and slopes~~ are outlined below. Map Refinement provisions for Top-of-bank, Riparian Corridor, and Wetland boundaries are outlined in Chapter 4.13 - Riparian Corridor and Wetland Provisions. Map Refinement provisions for Landslide Hazard areas and slopes are outlined in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Map Refinements are also adjustments to resolve registration issues that may occur between different GIS layers or maps, or adjustments that may be necessary to comply with updates to applicable Flood Insurance Rate Maps, Digital Flood Insurance Rate Maps, and Flood Insurance Studies issued by the Federal Emergency Management Agency. *[Allowed by current Code now, but provides further clarity]*

b~~a~~. **Floodplain and Floodway Boundaries** - The precise locations of Floodplain and Floodway boundaries are determined as follows:

1. 0.2-ft. Floodway - Surveyed and mapped by a licensed surveyor or civil engineer, using two-ft. contour intervals established by the survey, and outlining a river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than 0.2 ft.

2. 1.0-ft. Floodway - Surveyed and mapped by a licensed surveyor or civil engineer, using two-ft. contour intervals established by the survey, and outlining a river channel or other Watercourse and the adjacent land areas that must be reserved in order to discharge the Base Flood (100-year Flood) without cumulatively increasing the water surface elevation more than one ft.

3. 100-Year Floodplain -

   a) 100-Year Floodplain in Areas Studied by FEMA and Addressed by Current Federal Insurance Rate Map (FIRM) -

      1) Surveyed and mapped by a licensed surveyor or civil engineer, using the Base Flood E~~e~~levations established by the Federal Emergency Management Agency (FEMA) and two-ft. contour intervals established by the survey~~.~~; or

2) FEMA-approved adjustments as specified in "i," and "ii," below. However, no adjustments to the FIRM other than those specified in "i," and "ii," below may occur through the Map Refinement process.

i) Adjustments needed to comply with updates to applicable Flood Insurance Rate Maps, Digital Flood Insurance Rate Maps, and Flood Insurance Studies issued by the Federal Emergency Management Agency. *[Allowed by current Code now, but provides further clarity]*

ii) Adjustments needed to reflect Letters of Map Amendment (LOMAs) and Letters of Map Revision (LOMRs) approved by the Federal Emergency Management Agency (FEMA). The Director shall only correct the 100-year Floodplain portion of the City's maps to exactly reflect FEMA decisions. *[This provision was moved from the Map Correction section because it involves official FEMA decisions that the City is mandated to implement.]*

b) 100-Year Floodplain in Areas Not Studied by FEMA and Not Addressed by Current Federal Insurance Rate Map (FIRM) - Sections 4.5.20.01.b and 4.5.50.03.p require Floodplain Studies to identify the 100-year Floodplain and related information in areas that are unmapped by the current FEMA Flood Insurance Study for Benton County and Incorporated Areas, dated, _____, 2010, and are, therefore, not shown on the current Federal Insurance Rate Map (FIRM). Provided the information is entirely consistent with Sections 4.5.20.01.b and 4.5.50.03.p, the Map Refinement process can be used to map the 100-yr. Floodplain for these unstudied and unmapped areas. Once identified and approved by the Floodplain Administrator or designee, these newly mapped areas shall be reflected in the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and graphically depicted as High Protection Floodplain on the Natural Hazards Map.

~~**b. Landslide Hazard Area Boundaries** - The precise locations of Landslide Hazard area boundaries are determined by one of the following two methods:~~

~~1. Site Assessments and/or Geotechnical Reports, as required per Section 4.5.70; or~~

~~2. Information provided by the Oregon Department of Geology and Mining Industries (DOGAMI), once it has been developed and finalized by DOGAMI.~~

~~If these areas are not precisely mapped by one of these two methods, the 500-ft. setback required by Section 4.5.70.02 shall be maintained.~~

~~**c. Slope Boundaries -** The precise locations of the steep slope boundaries are determined by one of the following two methods, consistent with the provisions of Section 4.5.60.03:~~

~~1. Using the information from the Natural Hazards database and creating a topographic map of the development site showing two-ft. contour intervals; or~~

~~2. Using a topographic survey, showing two-ft. contour intervals, prepared and stamped by a licensed surveyor or civil engineer.~~

4.5.13~~9~~0.03 - Map Refinement Procedures

a. Adjustments to maps consistent with the provisions of Sections 4.5.13~~9~~0.01 and 4.5.13~~9~~0.02, above, are considered to be Map Refinements and may be Ministerially adjusted on the relevant maps, with no land use process required other than a demonstrated adherence to the provisions of S~~s~~ections 4.5.13~~9~~0.01 and 4.5.13~~9~~0.02.

b. Adjustments to maps to address FEMA-approved Letters of Map Amendment (LOMAs) and Letters of Map Revisions (LOMRs) for 100-year Floodplain information may be requested following written verification of a LOMA or LOMR approved by the Federal Emergency Management Agency (FEMA). When the FEMA determines that a LOMA or LOMR should be approved, and written documentation of the approval is provided to the Community Development Director, the Director shall ensure that changes reflected in the LOMA or LOMR are reflected in the City's affected maps and databases. *[This provision was moved from the Map Correction section because it involves official FEMA decisions that the City is mandated to implement.]*

4.5.14~~0~~0 - MAP CORRECTIONS

No Zone Change or Comprehensive Plan Map Amendment shall be required to accomplish Map Corrections approved in accordance with the provisions outlined in this Section.

a. Decisions regarding Map Correction requests shall be made by the Community Development Director, as specified in S~~s~~ections 4.5.14~~0~~0.01 and 4.5.14~~0~~0.02, below. Upon approval of a Map Correction request, the Director shall ensure that

changes are reflected in the City's affected maps and databases. Notice of such Map Correction shall be provided to decision-makers as outlined in Section 4.5.14~~0~~0.b, below.

b. When requests for five Map Corrections on any Natural Hazard or Natural Resource for which a Map Correction is allowed have been submitted to and decided upon by the Community Development Department Director, or approximately twice a year, whichever is sooner, the Map Correction requests shall be summarized in an informational memo for decision-makers so that they may review them for tracking purposes in accordance with Comprehensive Plan Policy 4.2.6. This memo shall be shared with the Corvallis Planning Commission and City Council for Map Correction requests on lands within the City limits; and with the Corvallis and Benton County Planning Commissions, the Corvallis City Council, and the Benton County Board of Commissioners for Map Correction requests on lands within the Urban Fringe.

4.5.14~~0~~0.01 - Map Corrections Defined

a. A Map Correction is not the type of adjustment described in the Map Refinement provisions of Section 4.5.13~~9~~0, above. A Map Correction is, however, an actual correction to maps referencing Natural Hazards or Natural Resources other than Significant Vegetation areas, where it is found that the map depiction does not reflect the Natural Features Inventory. As the Natural Features Inventory (NFI) was the basis for developing the City's maps that reference Natural Hazards and Natural Resources, a correction to the NFI for Natural Hazards or Natural Resources other than Significant Vegetation areas could result in a correction to the related maps. These maps include the Comprehensive Plan Map, Local Wetlands Inventory Map, Official Zoning Map, Natural Hazards Map, or Riparian Corridors and Wetlands Map.

b. Map Correction provisions for the100-year Floodplain ~~and Landslide Hazard areas~~ are outlined below. Adjustments to other hazards governed by this chapter are not Map Corrections, but are Map Refinements and are addressed through the provisions of Section 4.5.13~~9~~0, above. Map Correction provisions for Riparian Corridor widths and Wetland boundaries are outlined in Chapter 4.13 - Riparian Corridor and Wetland Provisions. Map Correction provisions for Landslide Hazard Areas are outlined in Chapter 4.14 - Landslide Hazard and Hillside Development Provisions.

~~**a. 100-Year Floodplain -** Map Corrections for 100-year Floodplain information may be approved by the Community Development Department Director subsequent to the approval of a Letter of Map Amendment (LOMA) by the Federal Emergency Management Agency (FEMA). The Director shall only correct the 100-year Floodplain portion of the City's maps to exactly reflect FEMA decisions.~~ *[This provision was moved to the Map Refinement section*

because it involves official FEMA decisions that the City is mandated to implement.]

~~**b. Landslide Hazard Areas** - Landslide Hazard area boundaries may be refined through the Map Refinement procedures outlined in 4.5.90, above. However, if technical data demonstrates that no Landslide Hazard exists within or near an area identified as a potential Landslide Hazard on the City's maps, a Map Correction may be accomplished to delete the Landslide Hazard indication from the maps. Such technical data must be from:~~

~~1. A site assessment and geotechnical report; or~~

~~2. The Oregon Department of Geology and Mining Industries (DOGAMI).~~

4.5.14~~0~~0.02 - Map Corrections Procedures for 100-year Floodplain -

~~**a. 100-Year Floodplain -**~~
~~Map Corrections for 100-year Floodplain information may be requested following written verification of a Letter of Map Amendment (LOMA) approved by the Federal Emergency Management Agency (FEMA). When the FEMA determines that a LOMA should be approved, and written documentation of the approval is provided to the Community Development Director, the Director shall ensure that changes reflected in the LOMA are reflected in the City's affected maps and databases.~~ *[This provision was moved to the Map Refinement section because it involves official FEMA decisions that the City is mandated to implement.]*

~~**b. Landslide Hazard Areas -** There are two procedures available for a Map Correction involving the removal of a Landslide Hazard area from the Natural Hazards Map.~~

~~1. Removal of a Landslide Hazard Area from Determination by the Oregon Department of Geology and Mining Industries (DOGAMI) -~~

~~If in finalizing its data and maps regarding Landslide Hazard areas the Oregon Department of Geology and Mining Industries (DOGAMI) determines that no Landslide Hazard exists within or near an area identified as a potential Landslide Hazard on the Natural Hazards Map, then a Map Correction to remove indication of the Landslide Hazard area shall be done by the Community Development Department Director, following written verification of the DOGAMI's determination. When such written documentation of the determination is provided to the Director, the Director shall ensure that the changes reflected by the DOGAMI decision are reflected in the City's affected maps and databases.~~

2. ~~Removal of a Landslide Hazard Area from Determinations Reached by a Site Assessment and Geotechnical Report -~~

~~If a property owner or property owner's legal representative provides the Community Development Department Director with the items listed in "a," below, a request to remove indication of a Landslide Hazard area from the Natural Hazards Map and other affected maps may be considered as outlined in "b," and "c," below.~~

a) ~~For a Map Correction request to consider removal of a Landslide Hazard from the Natural Hazards Map and other related maps, the following information is required:~~

1) ~~A Site Assessment and Geotechnical Report which meet the criteria identified in sections 4.5.60.04 and 4.5.60.05. In addition to the items identified in Section 4.5.60.05, the Geotechnical Report shall specifically address the lack of presence, characteristics, and/or precise location of the identified hazard(s) on the subject property which is/are depicted on the Natural Hazards Map. If other reports are called for by the Site Assessment, these reports shall also be submitted; and~~

2) ~~An indemnification and release agreement in accordance with the provisions of Section 4.5.70.04;~~

b) ~~For lands within the City limits, Map Correction requests shall be reviewed by the Building Official and City Engineer, in coordination with the Community Development Department. The Community Development Director shall make the final decision. For lands within the Urban Fringe, Map Correction requests shall be reviewed by the Building Official and City Engineer, in coordination with the Corvallis Community Development Department and the Benton County Development Department. For the Urban Fringe lands, the Corvallis Community Development Department Director shall also make the final decision.~~

c) ~~To approve a Map Correction request, the Director must find that:~~

1) ~~The information required by "a," above, has been provided and is complete;~~

2) ~~The required technical reports and recommendations sufficiently demonstrate that there is no Landslide~~

~~Hazard on or near the area identified on the Natural Hazards Map; and~~

~~3) The required technical reports and recommendations sufficiently demonstrate that development on the subject area would not increase landslide risks on the development site, or upon neighboring properties.~~

EXHIBIT C

COUNCIL-DIRECTED REVISIONS TO LDT10-00001

(TO BE DEVELOPED FOLLOWING BOTH PLANNING COMMISSION AND CITY COUNCIL PUBLIC HEARING PROCESSES FOR LDT10-00001. THE REVISIONS WILL BE DETERMINED BY THE CITY COUNCIL DURING DELIBERATIONS FOR LDT10-00001)

Federal Emergency Management Agency

Washington, D.C. 20472

RECEIVED

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
19P-N

DEC - 6 2010

December 2, 2010

The Honorable Charles Tomlinson
Mayor, City of Corvallis
501 SW Madison Avenue
Post Office Box 1083
Corvallis, Oregon 97339

Community: City of Corvallis,
Benton County, Oregon
Community No.: 410009
Map Panels Affected: See FIRM Index

Dear Mayor Tomlinson:

This is to formally notify you of the final flood hazard determination for your community in compliance with Title 44, Chapter I, Part 67, Code of Federal Regulations. On January 3, 1985, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issued a Flood Insurance Rate Map (FIRM) that identified the Special Flood Hazard Areas (SFHAs) the areas subject to inundation by the base (1-percent-annual-chance) flood in the City of Corvallis. Recently, FEMA completed a re-evaluation of flood hazards in your community. On July 21, 2009, FEMA provided you with Preliminary copies of the Flood Insurance Study (FIS) report and FIRM that identify existing flood hazards in your community.

FEMA has not received any comments on the Preliminary copies of the FIS report and FIRM. Accordingly, the FIS report and FIRM for your community will become effective on June 2, 2011. Before the effective date, FEMA will send you final digital copies of the FIS report and FIRM.

Because the FIS for your community has been completed, certain additional requirements must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within 6 months from the date of this letter. Prior to June 2, 2011, your community is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the enclosed NFIP regulations (44 CFR 59, etc.). These standards are the minimum requirements and do not supersede any State or local requirements of a more stringent nature.

It must be emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document. This includes adoption of the current effective FIS report and FIRM to which the regulations apply and the other modifications made by this map revision. Some of the standards should already have been enacted by your community in order to establish eligibility in the NFIP. Any additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have previously been adopted that meet or exceed the minimum

requirements of Paragraph 60.3(d).

Communities that fail to enact the necessary floodplain management regulations will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the Flood Disaster Protection Act of 1973 as amended.

In addition to your community using the FIS report and FIRM to manage development in the floodplain, FEMA will use the FIS report to establish appropriate flood insurance rates. On the effective date of the revised FIRM, actuarial rates for flood insurance will be charged for all new structures and substantial improvements to existing structures located in the identified SFHAs. These rates may be higher if structures are not built in compliance with the floodplain management standards of the NFIP. The actuarial flood insurance rates increase as the lowest elevations (including basement) of new structures decrease in relation to the Base Flood Elevations established for your community. This is an important consideration for new construction because building at a higher elevation can greatly reduce the cost of flood insurance.

To assist your community in maintaining the FIRM, we have enclosed a Summary of Map Actions to document previous Letter of Map Change (LOMC) actions (i.e., Letters of Map Amendment, Letters of Map Revision) that will be superseded when the revised FIRM panels referenced above become effective. Information on LOMCs is presented in the following four categories: (1) LOMCs for which results have been included on the revised FIRM panels; (2) LOMCs for which results could not be shown on the revised FIRM panels because of scale limitations or because the LOMC issued had determined that the lots or structures involved were outside the SFHA as shown on the FIRM; (3) LOMCs for which results have not been included on the revised FIRM panels because the flood hazard information on which the original determinations were based is being superseded by new flood hazard information; and (4) LOMCs issued for multiple lots or structures where the determination for one or more of the lots or structures cannot be revalidated through an administrative process like the LOMCs in Category 2 above. LOMCs in Category 2 will be revalidated through a single letter that reaffirms the validity of a previously issued LOMC; the letter will be sent to your community shortly before the effective date of the revised FIRM and will become effective 1 day after the revised FIRM becomes effective. For the LOMCs listed in Category 4, we will review the data previously submitted for the LOMA or LOMR request and issue a new determination for the affected properties after the revised FIRM becomes effective.

The FIRM and FIS report for your community have been prepared in our countywide format, which means that flood hazard information for all jurisdictions within Benton County, Oregon has been combined into one FIRM and FIS report. When the FIRM and FIS report are printed and distributed, your community will receive only those panels that present flood hazard information for your community. We will provide complete sets of the FIRM panels to county officials, where they will be available for review by your community.

The FIRM panels have been computer-generated. Once the FIRM and FIS report are printed and distributed, the digital files containing the flood hazard data for the entire county can be provided to your community for use in a computer mapping system. These files can be used in conjunction with other thematic data for floodplain management purposes, insurance purchase and rating requirements, and many other planning applications. Copies of the digital files or paper copies of the FIRM panels may be obtained by calling our FEMA Map Information eXchange (FMIX), toll free, at 1-877-FEMA MAP (1-877-336-2627).

In addition, your community may be eligible for additional credits under our Community Rating System if you implement your activities using digital mapping files.

If your community is encountering difficulties in enacting the necessary floodplain management measures, we urge you to call the Director, Federal Insurance and Mitigation Division of FEMA in Bothell, Washington at (425) 487-4600 for assistance. If you have any questions concerning mapping issues in general or the enclosed Summary of Map Actions, please call our FMIX at the toll free number shown above. Additional information and resources your community may find helpful regarding the NFIP and floodplain management, such as *The National Flood Insurance Program Code of Federal Regulations*, *Answers to Questions About the National Flood Insurance Program*, *Frequently Asked Questions Regarding the Effects that Revised Flood Hazards have on Existing Structure, Use of Flood Insurance Study (FIS) Data as Available Data,* and *National Flood Insurance Program Elevation Certificate and Instructions,* can be found on our website at http://www.floodmaps.fema.gov/lfd. Digital copies of these documents may also be obtained by calling our FMIX

Sincerely,

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Enclosure:
Final Summary of Map Actions

cc: Community Map Repository
Kevin Young, Planning Division Manager, City of Corvallis

FINAL SUMMARY OF MAP ACTIONS

Community: CORVALLIS, CITY OF Community No: 410009

To assist your community in maintaining the Flood Insurance Rate Map (FIRM), we have summarized below the previously issued Letter of Map Change (LOMC) actions (i.e., Letters of Map Revision (LOMRs) and Letters of Map Amendment (LOMAs)) that will be affected when the revised FIRM becomes effective on June 2, 2011.

1. LOMCs Incorporated

The modifications effected by the LOMCs listed below will be reflected on the revised FIRM. In addition, these LOMCs will remain in effect until the revised FIRM becomes effective.

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
102	04-10-0422P	02/16/2005	MILLRACE	4100090004E	41003C0192F

2. LOMCs Not Incorporated

The modifications effected by the LOMCs listed below will not be reflected on the revised FIRM panels because of scale limitations or because the LOMC issued had determined that the lot(s) or structure(s) involved were outside the Special Flood Hazard Area, as shown on the FIRM. These LOMCs will remain in effect until the revised FIRM becomes effective. These LOMCs will be revalidated free of charge 1 day after the revised FIRM becomes effective through a single revalidation letter that reaffirms the validity of the previous LOMCs.

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMA	199531715MBJ	05/03/1977	23.5 ACRES OF LOT 9-01.. .	410009B	41003C0184F
LOMA	199531462MBJ	08/17/1978	LOT 24, KING'S VIEW 2ND ADDITION – 2589 NW 29TH STREET	410009B	41003C0183F
LOMR-F	199107150FIA	04/30/1991	CREEDMORE ESTATES, LOTS 77-80 & 82 – 3137, 3129, 3123, 3115 & 3107 POWDERHORN PLACE	0002E	41003C0201F
LOMA	199107149FIA	04/30/1991	OAK PARK APARTMENTS, 1205 AND 1231 SW 26TH ST.	0004E	41003C0192F
LOMA	93-RX-0091	06/02/1993	LOT 6, WESTERN VIEW SECOND ADDITION	4100090005E	41003C0191F
LOMA	93-RX-0105	07/08/1993	LOT 11, JOHN HARMON ADDITION	4100090002E	41003C0182F
LOMA	93-RX-0153	12/15/1993	LOT 1, BLOCK 2, HIGHLAND MANOR	4100090002E	41003C0184F
LOMA	94-RX-0152	05/06/1994	LOT 22, BLOCK 3, HIGHLAND LAWN ACRES	4100090002E	41003C0184F

FINAL SUMMARY OF MAP ACTIONS

Community: CORVALLIS, CITY OF Community No: 410009

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMA	94-RX-0210	09/23/1994	LOT 13, AS ADJUSTED, JOHN HARMON ADDITION	4100090002E	41003C0182F
LOMA	95-R10-223	09/01/1995	PORTION OF LOTS 4 & 5, BLOCK 1 KING'S VIEW ADDITION	4100090001E	41003C0183F
LOMA	96-R10-008	10/16/1995	Beginning at the Southeast corner of the tract described in deed recorded in Book 168	4100090006E	41003C0192F
LOMA	96-R10-025	10/23/1995	LOT 27, WESTERN VIEW SECOND ADDITION	4100090005E	41003C0191F
LOMR-F	96-10-038A	04/05/1996	OAK CREEK ACRES, BLOCK 3, LOT 3 -- 2720 SW MORRIS AVE.	4100090004E	41003C0191F
LOMA	98-10-249A	05/05/1998	1620 SW 35TH STREET-- PARCEL 1,A PORTION OF PARTITION PLAT NO. 94-29,SECTION 3,T12S,R5W,WM.	4100090005E	41003C0191F
LOMA	99-10-055A	03/05/1999	JOHN HARMAN ADDITION, LOT 26 -- 875 NW ERMINE PLACE	4100090002E	41003C0182F
LOMA	99-10-261A	04/22/1999	BUTTERFIELD STATION, LOT 19 -- 2025 SW BUTTERFIELD DRIVE	4100090006E	41003C0192F
LOMA	99-10-445A	07/22/1999	WESTERN VIEW 2ND ADDITION, LOT 29 -- 1637 SW REED PLACE	4100090005E	41003C0191F
LOMA	99-10-605A	10/08/1999	JOHN HARMAN ADDITION, LOT 12 -- 3064 NW MAXINE CIRCLE	4100090002E	41003C0182F
LOMA	01-10-098A	12/22/2000	VILLAGE GREEN 2ND ADDITION, LOT 2 -- 3152 NE NEWCASTLE PLACE	4100090002E	41003C0201F
LOMA	01-10-195A	02/09/2001	MIDDLEBORO, LOT 21 -- 1741/1743 NW GRANT CIRCLE	4100090002E	41003C0184F
LOMR-F	01-10-129A	03/28/2001	SW HOPKINS AVENUE -- PORTION OF SECTION 2, T12S, R5W, W.M.	4100090006E	41003C0192F
LOMR-F	01-10-390A	07/02/2001	1245 SE THIRD STREET -- PORTION OF J.C. AVERY DLC, T12S, R5W, W.M.	4100090004E	41003C0192F
LOMA	01-10-563A	09/21/2001	VILLAGE GREEN 2ND ADDITION, LOT 3 -- 3128 NE NEWCASTLE PLACE	4100090002E	41003C0201F
LOMA	02-10-231A	02/27/2002	OAK CREEK ACRES, BLOCK 1, LOTS 6-8 -- 2733 & 2741 SW MORRIS AVENUE	4100090004E	41003C0192F
LOMA	02-10-248A	03/06/2002	LINCOLN TRACTS, TRACT 10 -- 240 SE LILLY AVENUE	4100090006E	41003C0192F
LOMA	02-10-423A	05/15/2002	COUNTRY CLUB MEADOWS, LOT 42 -- 1468 SW BIRDIE DRIVE	4100090005E	41003C0191F

FINAL SUMMARY OF MAP ACTIONS

Community: CORVALLIS, CITY OF Community No: 410009

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMA	02-10-578A	09/25/2002	HIGHLAND LAWN ACRES, BLOCK 2, LOT 16 -- 2161 NW JANSSEN STREET	4100090002E	41003C0184F
LOMA	03-10-0323A	04/09/2003	MCKAY SUBDIV REPLAT, LOT 1 -- 110 SE ATWOOD AVENUE	4100090006E	41003C0192F
LOMR-F	03-10-0301A	04/23/2003	1565 SW 53RD STREET ET AL -- SUNSET COMMERCIAL CENTER, PORTION OF SECTION 4, T12S, R5W, W.M.	4100090005E	41003C0191F
LOMA	03-10-0504A	06/04/2003	900 NW 4TH STREET -- PORTION OF SECTION 35, T11S, R5W, W.M.	4100090004E	41003C0184F
LOMA	03-10-0513A	06/11/2003	CREEDMORE, LOT 72 -- 3185 NE POWDERHORN PLACE	4100090002E	41003C0201F
LOMA	03-10-0555A	06/25/2003	COUNTRY CLUB MEADOWS, LOT 38 -- 1514 SW BIRDIE DRIVE	4100090005E	41003C0191F
LOMA	03-10-0530A	06/25/2003	HIGHLAND LAWN ACRES, BLOCK 3, LOT 23 -- 915 NW SYCAMORE AVENUE	4100090002E	41003C0184F
LOMA	03-10-0664A	07/24/2003	SATINWOOD VILLAGE, LOTS 5-6 -- 824/822 NW SUNDANCE CIRCLE	4100090002E	41003C0182F
LOMR-F	03-10-0661A	08/22/2003	CONIFER VILLAGE V, PHASE 1, LOT 10 -- 1038 NE DIANE PLACE	4100090002E	41003C0201F
LOMA	04-10-0341A	03/05/2004	JOHN HARMAN ADDITION, LOT 24 -- 856 NW ERMINE PLACE	4100090002E	41003C0182F
LOMA	04-10-0202A	03/31/2004	2500 SW WESTERN BOULEVARD -- PORTION OF SECTION 3, T12S, R5W, W.M.	4100090004E	41003C0192F 41003C0192G
LOMA	04-10-0297A	04/02/2004	HIGHLAND LAWN ACRES, BLOCK 3, LOT 24 -- 911 NW SYCAMORE	4100090002E	41003C0184F
LOMA	04-10-0618A	08/11/2004	MEADOW PARK VILLA, LOT 26 -- 3240 NE LANCASTER STREET	4100090002E	41003C0201F
LOMA	05-10-0020A	11/23/2004	CREEDMORE, LOTS 69-70 -- 3190/3196 NE POWDERHORN DRIVE	4100090002E	41003C0201F
LOMA	05-10-0149A	01/21/2005	280/282 NE CONIFER BLVD -- PORTION OF SECTION 24, T11S, R5W, W.M.	4100090002E	41003C0201F
LOMA	05-10-0178A	02/16/2005	PARKSIDE II, LOT 7 -- 1751 NW 17TH PLACE	4100090002E	41003C0184F
LOMR-F	05-10-0271A	03/16/2005	5270 SW PHILOMATH BLVD, SEC 4, T12S, R5W, W.M.	4100090005E	41003C0191F
LOMR-F	05-10-0399A	05/05/2005	1035 NE DIANE PLACE, LOT 9, CONIFER VILLAGE V	4100090002E	41003C0201F

FINAL SUMMARY OF MAP ACTIONS

Community: CORVALLIS, CITY OF Community No: 410009

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMA	05-10-0730A	09/01/2005	520 NW OAK AVENUE	4100090002E	41003C0184F
LOMA	05-10-0800A	09/16/2005	275, 277, 279 SE LILLY AVENUE	4100090006E	41003C0192F
LOMA	05-10-0848A	09/29/2005	KINGS VIEW ADDITION, BLOCK 1, LOT 3 -- 3010 NW WALNUT BOULEVARD	4100090001E	41003C0183F
LOMA	06-10-0069A	11/08/2005	1620 SW MARTIN STREET -- PORTIONS OF LOTS 4 & 5, MARTIN ADDITION	4100090005E	41003C0191F
LOMR-F	06-10-B014A	01/20/2006	1029 NE DIANE PLACE (OR)	4100090002E	41003C0201F
LOMA	06-10-B126A	02/14/2006	1652 SW KNOLLBROOK PLACE-LOT 8, WESTERN VIEW 2ND ADDITION	4100090005E	41003C0191F
LOMR-F	06-10-B294A	05/12/2006	2835 SW WESTERN BLVD -- PORTION OF SECTION 3, T12S, R5W (OR)	4100090003E	41003C0192F
LOMR-F	06-10-B340A	06/06/2006	LONDON PLACE TOWNHOMES, LOTS 2-16	4100090002E	41003C0201F
LOMA	06-10-B520A	08/24/2006	MEADOW PARK VILLA, LOTS 1, 8, 9	4100090002E	41003C0201F
LOMA	06-10-B587A	09/12/2006	N.E. LANCASTER STREET -- MEADOW PARK VILLA, LOTS 2-7 AND 14	4100090002E	41003C0201F
LOMA	06-10-B658A	10/24/2006	CREEDMORE, LOT 51 -- 3157 NE FLINTLOCK PLACE	4100090002E	41003C0201F
LOMA	07-10-0232A	03/22/2007	1750 SW EDGEING DRIVE	4100090006E	41003C0192F
LOMA	07-10-0487A	05/17/2007	VILLAGE GREEN, BLOCK 3, LOT 17 -- 382/384 NE CONIFER BOULEVARD (OR)	4100090002E	41003C0201F
LOMA	07-10-0413A	06/19/2007	3070 NE NEWCASTLE PLACE -- LOT 5, VILLAGE GREEN 2ND ADDITION	4100090002E	41003C0201F
LOMR-F	07-10-0715A	08/28/2007	MEADOW PARK VILLA, LOT 4 -- 3324 NE LANCASTER STREET	4100090002E	41003C0201F
LOMA	07-10-0738A	09/25/2007	HIGHLAND LAWN ACRES, BLOCK 3, LOT 21 -- 923 NW SYCAMORE AVENUE	4100090002E	41003C0184F
LOMA	08-10-0051A	11/20/2007	HIGHLAND LAWN ACRES, BLOCK 3, LOT 23 -- 915 NW SYCAMORE AVENUE	4100090002E	41003C0184F
LOMA	08-10-0596A	07/02/2008	2915 NE LANCASTER STREET -- VILLAGE GREEN, BLOCK 6, LOT 19	4100090002E	41003C0201F

FINAL SUMMARY OF MAP ACTIONS

Community: CORVALLIS, CITY OF Community No: 410009

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMA	08-10-0620A	07/10/2008	913 NW SYCAMORE AVENUE -- PARCEL 2, PARTITION PARCEL MAP NO.2007-38	4100090002E	41003C0182F
LOMA	08-10-0659A	07/15/2008	VILLAGE GREEN, BLOCK 6, LOT 19 -- 2915 NE LANCASTER STREET	4100090002E	41003C0201F
LOMR-F	08-10-0662A	07/31/2008	PORTION OF SEC 2, T12S, R5W, WM -- 211 SOUTH EAST CHAPMAN PLACE	4100090004E	41003C0192F
LOMA	09-10-0099A	12/04/2008	VILLAGE GREEN, BLOCK 6, LOT 30 -- 3155 NE LANCASTER STREET	4100090002E	41003C0201F
LOMR-F	09-10-0160A	12/11/2008	COUNTRY CLUB MEADOWS, LOT 34 -- 1532 SW BIRDIE DRIVE	4100090005E	41003C0191F
LOMA	09-10-0202A	12/23/2008	VILLAGE GREEN, BLOCK 3, LOT 15 -- 3130 NE LANCASTER	4100090002E	41003C0201F
LOMA	09-10-0195A	01/08/2009	BETHEL HOMES, BLOCK 4, LOT 2 -- 310/320 SE ATWOOD AVENUE	4100090006E	41003C0192F
LOMA	09-10-0176A	01/15/2009	HIGHLAND LAWN ACRES, LOTS 2700 & 2800 -- 2200 NW 9TH STREET	4100090002E	41003C0184F
LOMA	09-10-0310A	02/17/2009	DIXIE DALE ADDITION, BLOCK 3, LOT 5 -- 2320 NW 27TH STREET	4100090001E	41003C0183F
LOMR-F	09-10-0683A	06/11/2009	470 & 490 SW HOPKINS AVENUE -- A PORTION OF SECTION 2, T12S, R5W, W.M.	4100090006E	41003C0192F
LOMA	09-10-0875A	08/13/2009	HIGHLAND LAWN ACRES, BLOCK 3, LOT 14 -- 969 NW SYCAMORE AVENUE	4100090002E	41003C0184F
LOMA	09-10-0774A	08/31/2009	PARCEL 5 -- 720 NW 5TH STREET	4100090004E	41003C0184F
LOMA	09-10-1156A	11/05/2009	635 NW 5TH STREET	4100090004E	41003C0184F
LOMR-F	09-10-1202A	11/12/2009	LOTS 1 & 2, CONIFER VILLAGE V, PHASE ONE-- 2811, 2819 NORTHEAST CONSER STREET	4100090002E	41003C0201F
LOMR-F	09-10-1203A	11/19/2009	LOT 13, MEADOW PARK VILLA -- 3290 NE LANCASTER STREET	4100090002E	41003C0201F
LOMA	09-10-1194A	12/15/2009	EAST HALF OF LOTS 7 & 8, BLOCK 17, DIXON'S 2ND ADDITION -- 555 & 557 NW Polk Avenue	4100090004E	41003C0184F
LOMA	10-10-0425A	03/30/2010	640&650 NORTH WEST 5TH STREET	4100090004E	41003C0184F
LOMA	10-10-0590A	05/25/2010	728 NORTHWEST 4TH STREET	4100090004E	41003C0184F

FINAL SUMMARY OF MAP ACTIONS

Community: CORVALLIS, CITY OF Community No: 410009

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
LOMR-FW	10-10-0859A	08/19/2010	LOT 6, REPLAT OF MCKAY SUBDIVSION -- 142 SOUTHEAST ATWOOD AVENUE	4100090006E	41003C0192F
LOMR-FW	10-10-1174A	10/07/2010	LOT 5, REPLAT OF MCKAY SUBDIVISION -- 140 SOUTHEAST ATWOOD AVENUE	4100090006E	41003C0192F
LOMA	09-10-1145A	09/17/2009	939 NW 11 Street	4100090004E	41003C0184F

3. LOMCs Superseded

The modifications effected by the LOMCs listed below have not been reflected on the Final revised FIRM panels because they are being superseded by new detailed flood hazard information or the information available was not sufficient to make a determination. The reason each is being superseded is noted below. These LOMCs will no longer be in effect when the revised FIRM becomes effective.

LOMC	Case No.	Date Issued	Project Identifier	Reason Determination Will be Superseded
			NO CASES RECORDED	

1. Insufficient information available to make a determination.
2. Lowest Adjacent Grade and Lowest Finished Floor are below the proposed Base Flood Elevation.
3. Lowest Ground Elevation is below the proposed Base Flood Elevation.
4. Revised hydrologic and hydraulic analyses.
5. Revised topographic information.

4. LOMCs To Be Redetermined

The LOMCs in Category 2 above will be revalidated through a single revalidation letter that reaffirms the validity of the determination in the previously issued LOMC. For LOMCs issued for multiple lots or structures where the determination for one or more of the lots or structures has changed, the LOMC cannot be revalidated through this administrative process. Therefore, we will review the data previously submitted for the LOMC requests listed below and issue a new determination for the affected properties after the effective date of the revised FIRM.

LOMC	Case No.	Date Issued	Project Identifier	Old Panel	New Panel
			NO CASES RECORDED		

MEMORANDUM

From: Ken Gibb, Community Development Director

To: Mayor and City Council

Date: December 22, 2010

Re: Initiation of Legislative Amendment to the Land Development Code Mandated by new FEMA Maps and Regulations

I. Issue

The Planning Division Work Plan approved on March 15, 2010, recognized the need for a Land Development Code Text Amendment to address new federal Emergency Management Agency (FEMA) floodplain maps and regulations. For the City to avoid suspension from the federal Flood Insurance Program (NFIP), the FEMA maps and federal floodplain standards need to be adopted by the City by June 2, 2011. The new standards will primarily amend Land Development Code Chapter 4.5 - Natural Hazard and Hillside Development Provisions, but will also amend Chapter 1.4 - Nonconforming Development, Chapter 1.6 - Definitions, and a number of other chapters affected to maintain consistency across these coordinated chapters. A new Chapter 2.11 - Floodplain Development Permit will be introduced into the Land Development Code. Additionally, the landslide hazard and hillside provisions will be moved from the existing Chapter 4.5 and placed in a separate and new Chapter 4.14 - Landslide Hazard and Hillside Development Provisions in order to reduce the length and subject matter of Chapter 4.5 - Floodplain Provisions and make the hillside and landslide provisions easier for customers to find.

This memo provides further information on this issue and requests that the City Council formally initiate this Legislative Amendment to the Land Development Code. The tentative project schedule is attached and that schedule includes a public hearing before the Planning Commission on February 2, 2011.

II. Background/Discussion

A. Federal Mandate for FEMA Update

In 2005, FEMA began a nationwide project to update the country's federal Flood Insurance Rate Maps (FIRMs). As part of this FEMA map modernization process, FEMA digitized the current paper FIRM maps associated with the Benton County Flood Insurance Study. No new FEMA studies were done.

For Benton County, the updated materials will be contained in a scientific engineering report entitled, "The Flood Insurance Study for Benton County, Oregon and Incorporated Areas" dated *(this date will likely be June 2)*, 2010, with accompanying Flood Insurance Rate Map (FIRM).

However, because the digitization is based on topographic maps, some of the floodplain boundaries are different and more accurate than the boundaries shown on the current paper maps. On December 2, 2010, FEMA considered the digitized maps to be ready for implementation and issued a Letter of Final Determination for the Benton County Flood Insurance Study. Federal law requires that within six months following the release of a FEMA Letter of Final Determination, a jurisdiction must implement the new maps and adopt updated land use regulations to fully address the National Flood Insurance Program (NFIP) regulations. Failure to accomplish these tasks within the six month period will result in the jurisdiction's suspension from the National Flood Insurance Program. Therefore, the City of Corvallis is required to accomplish these efforts by June 2, 2010.

Cities and unincorporated areas within Benton County will be required to begin using updated maps (FEMA uses the term "modernized") on June 2, 2010. Banks and insurance companies must also begin using the maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies.

The Oregon Department of Land Conservation and Development (DLCD) has been working with FEMA to ensure that existing development codes of jurisdictions affected by the map modernization process are consistent with current federal 100-year floodplain regulations. The state-level review of the Corvallis LDC identified a number of areas where modifications were necessary. The most important of these was the need to create an independent Floodplain Development Permit program that will track development in the 100-year floodplain. While the City of Corvallis has been tracking development in the 100-year floodplain, the information has not been kept separate from other Building Permits or permanently retained as Floodplain Development Permits, as required by the federal regulations.

The National Flood Insurance Program (NFIP) regulations require a Floodplain Development Permit for all proposed construction and other development in the community, where such construction and/or other development occurs within the 100-yr. floodplain. As part of the Legislative Amendment to the LDC process, the City will be implementing the mandated Floodplain Development Permit process and other NFIP regulations that are not already addressed by the combination of the City's land use, building permit, and construction permit processes.

B. Map Changes

In some cases, FEMA map modernization resulted in changes to flood zone boundaries. Buildings once considered to be outside of a flood zone now may be shown to be inside, and the converse may also be true. New flood maps tend also to trigger mortgage lenders to review their loan portfolios to ensure that all buildings located in high hazard flood zones have appropriate flood insurance. Therefore, even if the flood zone boundaries in a particular area did not change, mortgage lenders may soon notify property owners in that area of the requirement to purchase flood insurance.

The FEMA map updates will affect the Natural Hazards Overlay on the Comprehensive Plan and Zoning Maps, and will also affect the High Protection and Partial Protection Floodplain boundaries on the Natural Hazards Map (a component of the Zoning Map). Since these map revisions are mandated by FEMA, they are currently allowed through the Map Refinement procedures in Section 4.5.90 and do not require any formal land use process. Therefore, Planning Division staff are working with Public Works GIS and Development Review Engineering Staff, as well as Development Services Division staff and DLCD/FEMA staff, to implement the mapping changes. These are not attached and will be implemented per Section 4.5.90.

C. Land Development Code Text Changes

The federally mandated land use regulation updates will affect the Land Development Code. Section 1.2.80 of the Land Development Code requires such revisions to be processed as a Legislative Amendment to the Land Development Code. Section 1.2.80 also requires that such Legislative Amendments to the LDT be initiated and go through public hearing processes before both the Planning Commission and City Council.

As mentioned, the Council-approved Planning Division Work Plan for the current year recognized the need for a Legislative Amendment to the Land Development Code to address new federal Emergency Management Agency (FEMA) floodplain maps and regulations. The basic components of the LDT will involve:

1. **Revised Chapter 4.5 & New Chapter 4.14 -** Working from the existing LDC framework, the bulk of the required revisions will occur within LDC Chapter 4.5 - Natural Hazard and Hillside Development Provisions. This chapter will be renamed Chapter 4.5 - Floodplain Provisions, will be updated to fully address the federal floodplain standards, and will be split such that the hillside development and landslide hazard provisions will be placed in a new Code chapter entitled Chapter 4.14 - Landslide Hazard and Hillside Development Provisions. Breaking off the hillside development and landslide hazard provisions will reduce the length of the

Chapter 4.5 and make the hillside development and landslide hazard provisions easier for customers to find in the Code.

2. **Revised Chapter 1.6 - Definitions -** A number of updates to this chapter, including the addition of new definitions and the modification of existing definitions, will be needed to incorporate the federal definitions for floodplain-related subject matter and fully comply with the applicable federal floodplain regulations.

3. **Revised Chapter 2.5 - Planned Development -** A number of changes to this chapter will be needed to address circumstances under which floodplain regulations can be varied, when the scope of such variations exceeds the scope of the federally mandated Floodplain Development Permit Variance procedures which will be contained within a new Chapter 2.11 - Floodplain Development Permit. These changes will also introduce additional criteria for such floodplain regulation variations.

4. **New Chapter 2.11 - Floodplain Development Permit -** This new chapter will be needed to address the federally mandated Floodplain Development Permit process. This chapter will also include the federally mandated Floodplain Development Permit Variance process, which is limited in scope. The Floodplain Development Permit process will be proposed as a staff-level process, similar to Building Permits. However, the Floodplain Development Permit Variance process and criteria involve discretion and will be set up as a public hearing process with review by the Land Development Hearings Board.

5. **Housekeeping Changes to Remainder of the Code to Address Changes in 1-4, Above -** There are numerous "housekeeping" changes that will need to occur throughout the Code to accommodate the changes in 1-4, above. For example, new Code citations to Chapter 2.11 - Floodplain Development Permit need to be addressed and other Code citations need to be addressed to accommodate the name change and Code section number changes for the hillside development and landslide hazard provisions (since they will be housed in a new Chapter 4.14 - Landslide Hazard and Hillside Development Provisions). New terminology from the new and revised definitions will be needed throughout the Code, and other changes will be needed to assure that the Code is internally consistent following the implementation of the changes in 1-4, above.

III. Request

As indicated, this Legislative Amendment to the Land Development Code was identified in the Planning Division's work plan, which was accepted by Council on March 15, 2010. This proposed Amendment is mandated by federal law and FEMA, and is necessary in order for the City to remain in the National Flood Insurance Program. Based on the preceding discussion, staff request that the City Council initiate this Legislative Amendment to the Land Development Code.

Motion: I move that the Council initiate a Land Development Code Text Amendment to address the FEMA-related requirements identified by staff in this memo.

Review and Concur:

Jon S. Nelson, City Manager

ATTACHMENTS:

A. December 2, 2010, Final Letter of Determination from Federal Emergency Management Agency (FEMA)

B. Tentative Project Schedule for FEMA Update Legislative Amendment to the Land Development Code

Federal Emergency Management Agency

Washington, D.C. 20472

RECEIVED

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
19P-N

DEC - 6 2010

December 2, 2010

The Honorable Charles Tomlinson
Mayor, City of Corvallis
501 SW Madison Avenue
Post Office Box 1083
Corvallis, Oregon 97339

Community: City of Corvallis,
Benton County, Oregon
Community No.: 410009
Map Panels Affected: See FIRM Index

Dear Mayor Tomlinson:

This is to formally notify you of the final flood hazard determination for your community in compliance with Title 44, Chapter I, Part 67, Code of Federal Regulations. On January 3, 1985, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) issued a Flood Insurance Rate Map (FIRM) that identified the Special Flood Hazard Areas (SFHAs) the areas subject to inundation by the base (1-percent-annual-chance) flood in the City of Corvallis. Recently, FEMA completed a re-evaluation of flood hazards in your community. On July 21, 2009, FEMA provided you with Preliminary copies of the Flood Insurance Study (FIS) report and FIRM that identify existing flood hazards in your community.

FEMA has not received any comments on the Preliminary copies of the FIS report and FIRM. Accordingly, the FIS report and FIRM for your community will become effective on June 2, 2011. Before the effective date, FEMA will send you final digital copies of the FIS report and FIRM.

Because the FIS for your community has been completed, certain additional requirements must be met under Section 1361 of the National Flood Insurance Act of 1968, as amended, within 6 months from the date of this letter. Prior to June 2, 2011, your community is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the enclosed NFIP regulations (44 CFR 59, etc.). These standards are the minimum requirements and do not supersede any State or local requirements of a more stringent nature.

It must be emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document. This includes adoption of the current effective FIS report and FIRM to which the regulations apply and the other modifications made by this map revision. Some of the standards should already have been enacted by your community in order to establish eligibility in the NFIP. Any additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);

2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or

3. Showing evidence that regulations have previously been adopted that meet or exceed the minimum

requirements of Paragraph 60.3(d).

Communities that fail to enact the necessary floodplain management regulations will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the Flood Disaster Protection Act of 1973 as amended.

In addition to your community using the FIS report and FIRM to manage development in the floodplain, FEMA will use the FIS report to establish appropriate flood insurance rates. On the effective date of the revised FIRM, actuarial rates for flood insurance will be charged for all new structures and substantial improvements to existing structures located in the identified SFHAs. These rates may be higher if structures are not built in compliance with the floodplain management standards of the NFIP. The actuarial flood insurance rates increase as the lowest elevations (including basement) of new structures decrease in relation to the Base Flood Elevations established for your community. This is an important consideration for new construction because building at a higher elevation can greatly reduce the cost of flood insurance.

To assist your community in maintaining the FIRM, we have enclosed a Summary of Map Actions to document previous Letter of Map Change (LOMC) actions (i.e., Letters of Map Amendment, Letters of Map Revision) that will be superseded when the revised FIRM panels referenced above become effective. Information on LOMCs is presented in the following four categories: (1) LOMCs for which results have been included on the revised FIRM panels; (2) LOMCs for which results could not be shown on the revised FIRM panels because of scale limitations or because the LOMC issued had determined that the lots or structures involved were outside the SFHA as shown on the FIRM; (3) LOMCs for which results have not been included on the revised FIRM panels because the flood hazard information on which the original determinations were based is being superseded by new flood hazard information; and (4) LOMCs issued for multiple lots or structures where the determination for one or more of the lots or structures cannot be revalidated through an administrative process like the LOMCs in Category 2 above. LOMCs in Category 2 will be revalidated through a single letter that reaffirms the validity of a previously issued LOMC; the letter will be sent to your community shortly before the effective date of the revised FIRM and will become effective 1 day after the revised FIRM becomes effective. For the LOMCs listed in Category 4, we will review the data previously submitted for the LOMA or LOMR request and issue a new determination for the affected properties after the revised FIRM becomes effective.

The FIRM and FIS report for your community have been prepared in our countywide format, which means that flood hazard information for all jurisdictions within Benton County, Oregon has been combined into one FIRM and FIS report. When the FIRM and FIS report are printed and distributed, your community will receive only those panels that present flood hazard information for your community. We will provide complete sets of the FIRM panels to county officials, where they will be available for review by your community.

The FIRM panels have been computer-generated. Once the FIRM and FIS report are printed and distributed, the digital files containing the flood hazard data for the entire county can be provided to your community for use in a computer mapping system. These files can be used in conjunction with other thematic data for floodplain management purposes, insurance purchase and rating requirements, and many other planning applications. Copies of the digital files or paper copies of the FIRM panels may be obtained by calling our FEMA Map Information eXchange (FMIX), toll free, at 1-877-FEMA MAP (1-877-336-2627).

In addition, your community may be eligible for additional credits under our Community Rating System if you implement your activities using digital mapping files.

If your community is encountering difficulties in enacting the necessary floodplain management measures, we urge you to call the Director, Federal Insurance and Mitigation Division of FEMA in Bothell, Washington at (425) 487-4600 for assistance. If you have any questions concerning mapping issues in general or the enclosed Summary of Map Actions, please call our FMIX at the toll free number shown above. Additional information and resources your community may find helpful regarding the NFIP and floodplain management, such as *The National Flood Insurance Program Code of Federal Regulations, Answers to Questions About the National Flood Insurance Program, Frequently Asked Questions Regarding the Effects that Revised Flood Hazards have on Existing Structure, Use of Flood Insurance Study (FIS) Data as Available Data,* and *National Flood Insurance Program Elevation Certificate and Instructions,* can be found on our website at http://www.floodmaps.fema.gov/lfd. Digital copies of these documents may also be obtained by calling our FMIX

Sincerely,

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Enclosure:
Final Summary of Map Actions

cc: Community Map Repository
Kevin Young, Planning Division Manager, City of Corvallis

The Complete Summary of FEMA Map Actions (Letters of Map Change that include Letters of Map Revisions and Letters of Map Amendment)

is available at the City of Corvallis Planning Division Office at 2300 NW Walnut Boulevard, Corvallis, OR 97330.

Contact Senior Planner Kelly Potter for questions
(541) 766-6908

TENTATIVE Project Schedule for
FEMA Update Legislative Amendment to the Land Development Code
December 22, 2010

Step	Activity	Dates	Notes	Month Number
Approval of Planning Div. Work Plan	CC Approved the Planning Division Work Program, which specifically called out this LDT	Mar. 15	DONE	0
Draft Regs/Maps Completed	Drafting of Regs and Maps by Staff, with input by key FEMA, State, & staff stakeholders	Done	DONE	
Staff Review	Broader Staff Stakeholder Review of Draft Regs & Maps & Revisions Done	Done	DONE	
DLCD	DLCD Notice of Proposed Adoption Mailed	Done 9/2	DONE	
FEMA 6-mo. Period Begins	FEMA Sent Final Letter of Determination	Dec 2	DONE	1
Outreach	CD Public Outreach Efforts Re: LDT & Use of New Floodplain Maps for building, land use, construction permits	Jan.		2
CC Initiation	Formal CC Initiation of LDT	Jan 3		
Planning Commission Review	Planning Commission Public Notice Mailed (M56 Notice) per 2.0.40.01.b	Jan 11	Must be 20-40 days prior to PC hearing	
	Planning Commission Staff Report Copied	Jan 21		
	Planning Commission Public Notice in GT	Jan 19	At least 10 days prior to hearing	
	Planning Commission Staff Report Released	Jan 26		
	Planning Commission Public Hearing	Feb 2		3
	Planning Commission Deliberations	Feb 16		
	Planning Commission Deliberations, if needed	Mar 2		4
City Council Review	CC Scheduling of Public Hearing	Mar 7		
	City Council Public Notice Mailed	Mar 14		
	Publish City Council notice in GT	Mar 23	At least 10 days prior to hearing	
	City Council Staff Report Copied	Mar 25		
	City Council Staff Report Released	Mar 28		
	City Council Public Hearing	Apr 4		5
	City Council deliberations	Apr 18		
	City Council adoption of findings & ordinance	May 2		6
	City Council 2nd reading of ordinance, if needed	May 16		
	City Council Notice of Disposition Mailed	May 18	Depends on day ordinance signed	
DLCD	DLCD Notice of Adoption Sent	May 18	Depends on day ordinance signed	
FEMA 6-mo. Period Ends	FEMA DEADLINE FOR IMPLEMENTATION OF LDT	Jun 2		

EXCERPT

CITY OF CORVALLIS
COUNCIL ACTION MINUTES
January 3, 2011

SUMMARY OF DISCUSSION

Agenda Item	Information Only	Held for Further Review	Decisions/Recommendations
Oaths of Office Page 4			
Consent Agenda Pages 4-5			
Mayor Reports 1. Standing Committee and Liaison Appointments 2. BCC directory 3. Council President and Vice President elections Pages 5-6	 Yes Yes		 • President: Councilor O'Brien • Vice President: Councilor Brauner
Council Reports 1. Holiday carolers–neighbors helping neighbors (Hervey) 2. Beca Street rain garden (Beilstein) 3. MLK celebration (Raymond) Page 6	 Yes Yes Yes		
Staff Reports 1. Labor Relations 101 2. DPC meeting cancellation 3. MLK January meeting 4. Council goals feedback 5. CRFR–December 30, 2010 6. Ward Meeting sign-up 7. GCC sign-up Pages 6-9	 Yes Yes Yes Yes Yes Yes Yes		
New Business 1. LDC text amendment–FEMA Page 10	 Yes		• Initiated text amendment passed U
Executive Session 1. AFSCME and CPOA pending labor negotiations Pages 10-11	 Yes		

Glossary of Terms

AFSCME	American Federation of State, County, and Municipal Employees
BCC	Boards, Committees, and Commissions
CPOA	Corvallis Police Officers Association
CRFR	Council Requests Follow-up Report
DPC	Downtown Parking Committee
FEMA	Federal Emergency Management Agency
GCC	Government Comment Corner
LDC	Land Development Code
MLK	Martin Luther King, Jr.
U	Unanimous

VIII. & IX. STANDING COMMITTEE REPORTS AND ORDINANCES, RESOLUTIONS, AND MOTIONS – None.

X. NEW BUSINESS

A. Initiation of a Land Development Code Text Amendment (LDT10-00001 - FEMA Update of LDC Floodplain Regulations)

Mr. Gibb explained that as part of the Planning Division work program discussion with Council in March 2010, it was noted that this item would come forward for Council consideration. In early December a notice from the Federal Emergency Management Agency (FEMA) directed the City to update maps and ensure the flood plain management program is in conformance with FEMA standards. This update allows the Corvallis community to be eligible for flood insurance. The staff report provides additional background information.

Staff requests Council initiate a Land Development Code (LDC) text amendment for the land development regulations to conform to FEMA requirements. The LDC requires Council initiate the amendment through the Planning Commission.

Text amendments are described within the staff report. FEMA maps will be refined based on FEMA requirements. The staff report includes a time frame through Council consideration. An open house is scheduled for January 25 at the Library. Notices will be sent to property owners potentially impacted by the changes. The Planning Commission public hearing is scheduled for February 2 and a Council public hearing is tentatively scheduled for April 4. Changes need to be approved by June 2.

Councilors Hirsch and O'Brien, respectively, moved and seconded to initiate a Land Development Code Text Amendment to address the FEMA-related requirements identified by staff. The motion passed unanimously.

VII. PUBLIC HEARINGS – None.

Councilor Hervey left the meeting at 1:00 pm.

Mayor Manning read a statement, based upon changes in Oregon laws regarding executive sessions. The statement indicated that only representatives of the news media, designated staff, and other Council-designated persons were allowed to attend the executive session. News media representatives were directed not to report on any executive session discussions, except to state the general subject of the discussion, as previously announced. No decisions would be made during the executive session. She reminded Council members and staff that the confidential executive session discussions belong to the Council as a body and should only be disclosed if the Council, as a body, approves disclosure. She suggested that any Council or staff member who may not be able to maintain Council's confidences should leave the meeting room.

Councilor Hervey returned to the meeting at 1:03 pm.

Council entered executive session at 1:04 pm.

EXHIBIT VI - 1/21/11 PC STAFF REPORT - PAGE 221

Ms. Volmert briefed Council on pending labor negotiations with AFSCME and CPOA.

XI. ADJOURNMENT

The meeting adjourned at 1:35 pm.

APPROVED:

MAYOR

ATTEST:

CITY RECORDER

EXHIBIT VI - 1/21/11 PC STAFF REPORT - PAGE 222

ATTACHMENT E
WRITTEN TESTIMONY

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, January 12, 2011 2:58 PM
To: 'James Baglien'
Subject: RE: Proposed Code changes for FEMA requirements

Hello James - The answer to your question is "no."

Kelly

-----Original Message-----
From: James Baglien [mailto:jbaglien@gmail.com]
Sent: Wednesday, January 12, 2011 2:05 PM
To: Potter, Kelly
Subject: Proposed Code changes for FEMA requirements

In the materials I received today, I saw reference to changes in City code only, not County.

We are in Benton County, within the UGB and bordering the City boundary line: Map # 11523AB, Tax Lots 2400 & 2500.

Would implementation of these City Code changes have any immediate relevance for us?

Thanks,

James S. Baglien

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 13, 2011 12:49 PM
To: 'ljmaki33@comcast.net'
Subject: RE: FEMA Floodplain Maps

Hello Judith and Leonard -

You're most welcome!

Kelly

From: ljmaki33@comcast.net [mailto:ljmaki33@comcast.net]
Sent: Thursday, January 13, 2011 12:41 PM
To: Potter, Kelly
Subject: Re: FEMA Floodplain Maps

Kelly -

Thank you for your very prompt response. We appreciated your clarifying what was a somewhat confusing bureaucratic document.

Needless to say, we have no plans to further develop our property or encroach upon the stream bed.

Judith & Leonard

----- Original Message -----
From: "Kelly Potter" <Kelly.Potter@ci.corvallis.or.us>
To: ljmaki33@comcast.net
Sent: Thursday, January 13, 2011 10:25:01 AM
Subject: RE: FEMA Floodplain Maps

Hello Judith and Leonard - You are correct in your assessment and were notified because you were so close to that stream. Your insurance carrier will NOT be notified because FEMA has not designated this area as a 100-year floodplain. You will NOT be required to purchase flood insurance. That is entirely up to you.

You really don't have any action to do at this point. If that stream was located in a manner that may cause flooding impacts to your property, and you wanted to redevelop or further develop your property (both unlikely, since you are already developed to urban standards), then the Floodplain Administrator would look at your situation and see if a floodplain study was needed. I think it highly unlikely that this scenario would come up in your particular case. Nevertheless, please feel free to contact me with any additional questions.

Kelly

From: ljmaki33@comcast.net [mailto:ljmaki33@comcast.net]
Sent: Thursday, January 13, 2011 8:53 AM
To: Potter, Kelly
Subject: FEMA Floodplain Maps

Dear Mr. Potter,

We recently received the notice regarding proposed changes in the Land Development Code to address FEMA requirements.

Our property (Map: 11521CD, Tax Lot: 6000) was designated as "May be Affected" by LDT 10-00001. The notice states that no FEMA study has been done and that future study will be required to determine the extent of any 100-year floodplain boundaries.

A small stream (winter only) exists on adjacent property, but it is clear from a cursory study of the terrain that there is no potential for damage to our property due to a 100-year flood.

Some immediate questions arise. Will our insurance carrier be notified that our property is in a floodplain even though no studies have been performed relative to our property? Will we be required to purchase National Flood Insurance? What action, if any will be required on our part at this time?

Sincerely,

Judith M. and Leonard M. Maki
2721 NW Romancier Dr.
Corvallis, OR 97330

541-752-6587

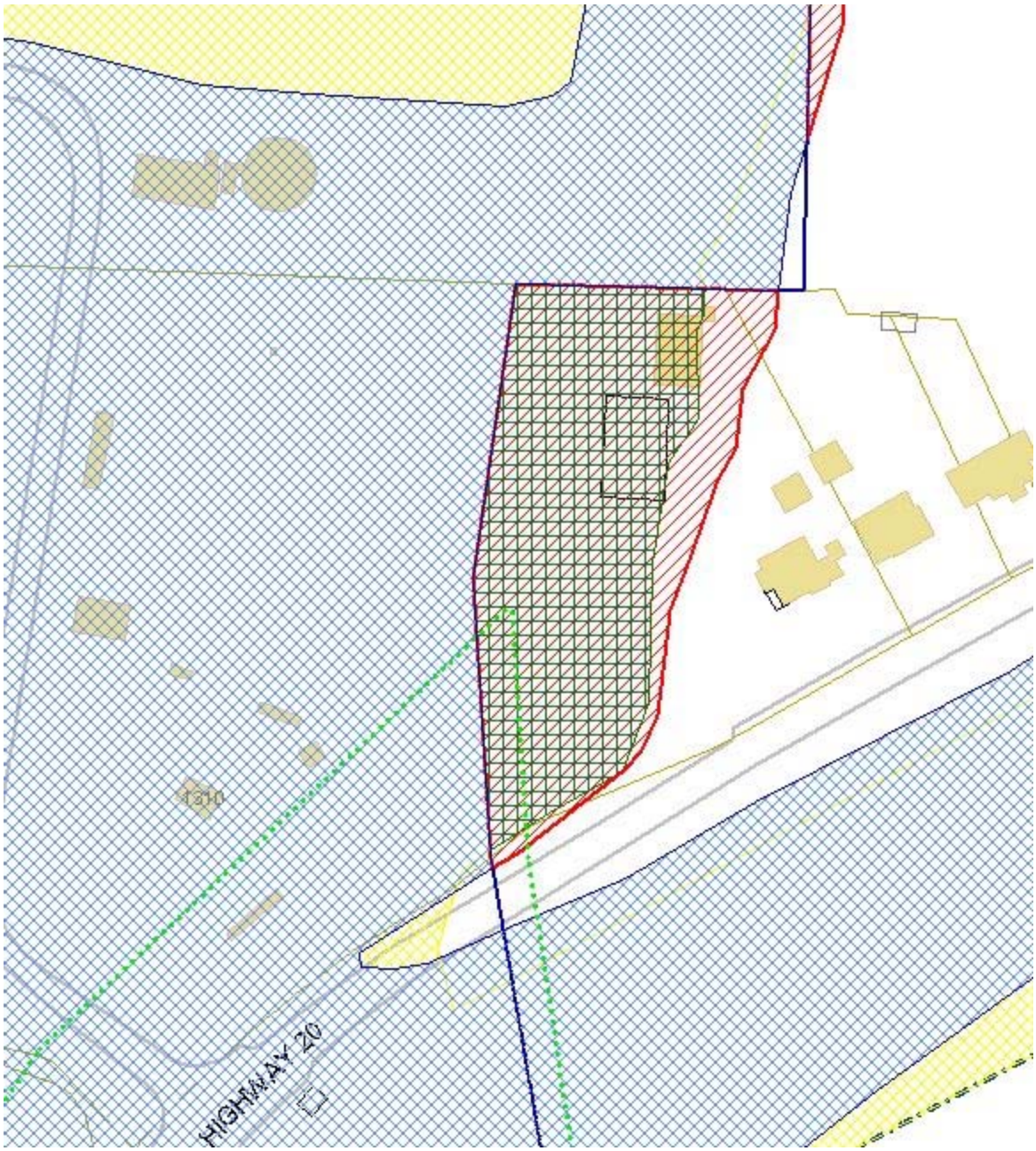
Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 13, 2011 10:13 AM
To: 'Bill Ten Pas'
Cc: LEWIS Toby A
Subject: RE: meeting and FEMA maps

Hello Bill and Kathy - You aare correct that you are outside the City limits, but received a notice because you directly abut the City. We mailed notices to anyone in the City and anyone abutting (just to be absolutely sure). Probably no need for you to attend our open house, since you are subject to Benton County regulations and I have included a map of the area where your properties are below.

Just FYI, the map below shows the old verses new floodplain in the area of your properties. The red cross-hatch indicates the new FEMA 100-year Floodplain boundary and the Green cross-hatch indicates the old/current FEMA 100-year Floodplain boundary.

As far as whether or not you will be subject to the floodplain regulations, the map indicates that you will be. However, if you have formally gone through the LOMA or LOMR process with FEMA to be exempted from the floodplain, then I suggest you work with Toby Lewis at Benton County on that.



From: Bill Ten Pas [mailto:tenpasb@odscompanies.com]
Sent: Thursday, January 13, 2011 6:53 AM
To: Potter, Kelly; Franklin, Lisa
Cc: btenpas@comcast.net
Subject: meeting and FEMA maps

We had a land survey that exempted us from required flood insurance and FEMA regulations. We just received a notice of a February 2nd meeting to implement new FEMA maps. We would ask two things.

1. Will the meeting have material indicating new areas covered in the new maps. Specifically our properties.
2. Will our properties, that had previously been exempted, now be included in the FEMA regulations.

Our properties are at 1330 and 1336 NE 2nd Street in Corvallis. We are not in the city limits.

Thank you for your help.

Bill and Kathy Ten Pas

William Ten Pas
President
ODS
(503) 228-6554
http://www.odscompanies.com

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Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:38 PM
To: Potter, Kelly
Subject: FW: floodplain map changes

From: Franklin, Lisa [mailto:Lisa.Franklin@ci.corvallis.or.us]
Sent: Tuesday, January 18, 2011 3:54 PM
To: Steve Allen
Subject: RE: floodplain map changes

The floodplain boundary in all these locations is changing. Fortunately, it is in your favor. I printed the maps for these properties for you and will gladly spend a few minutes going over them with you and what the changes really mean to you. Would you still like to make an appointment? If so, when works for you?

Lisa M. Franklin

From: Steve Allen [mailto:Steve@briarridgeliving.com]
Sent: Tuesday, January 18, 2011 1:50 PM
To: Franklin, Lisa
Subject: RE: floodplain map changes

Lisa:

1. Object ID 8959 BACO 11 5 35 BD Tax lot 106
2. Object 12234 Oak Park Apts. 12 5 03 AC #2300
3. Object 5271 ABI Enterprises 11 5 25 BO #2300

Thanks,
Steve

From: Franklin, Lisa [mailto:Lisa.Franklin@ci.corvallis.or.us]
Sent: Tuesday, January 18, 2011 1:29 PM
To: Steve Allen
Subject: RE: floodplain map changes

Of course you can make an appointment and we can pull up the properties on the map. Or, if you would like, you can send me a list of your addresses and I will pull them up and see if you are even impacted by the change. If you are, then we could schedule something to go over the changes.

Weds afternoon or Friday any time works for this week.

Lisa M. Franklin

From: Steve Allen [mailto:Steve@briarridgeliving.com]
Sent: Tuesday, January 18, 2011 1:17 PM
To: Franklin, Lisa
Subject: floodplain map changes

1/18/11 Dear Lisa;

I recently received three notices of the floodplain change process. Can I make an appointment to see you and go over the map changes to see what the impact may be on our property ? 15-30 minutes estimated.

Steve Allen

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:37 PM
To: 'Tim Dale'
Cc: Potter, Kelly
Subject: RE: Floodplain changes to my property

Tim,

The floodplain boundary for your site is barely changing. It will not directly impact you since your structure will still be the same distance from the 100-yr floodplain, which is all that is regulated. The 500-year boundary does encroach more onto your property, but it is not regulated and does not require insurance or special design standards.

I have not heard that insurance will change due to this, especially since you are not directly impacted. However, insurance rates do change regularly. This is more of an insurance question and is not my area, but I have not heard anything.

Land use classification is not changing. This is strictly a floodplain change at this time.

The map is available on our web site but it is extremely slow last I checked.

http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=4370&Itemid=4815

Please let me know if you have any additional questions.

Lisa M. Franklin, CE 1, CFM
City of Corvallis - Development Services
Ph: 541.766.6929 Fx: 541.766.6936

Please consider the environment before printing this e-mail.

From: Tim Dale [mailto:slimtail@hotmail.com]
Sent: Tuesday, January 18, 2011 4:23 PM
To: Franklin, Lisa
Subject: Floodplain changes to my property

Dear Lisa Franklin,

I have been reading over the information sent out by the City of Corvallis informing us of changes in the floodplain, in particular the remapping by FEMA. Contact information list you for Floodplain Map information.

Our home is designated as "WILL BE AFFECTED". I am guessing this means MORE of the property will be classified as in the floodplain. My questions thus far:

1. Where can I see the updated FEMA/FIRM map? I want to see how much of change the new Map depicts.

2. Should a rate change be expected? (Although this is more an Insurance Provider question.)

3. Does land use classification change? Our house is residential in the cilty limits.

Thanks for any info you can share concerning my questions.

Tim Dale
3020 SW Morris Ave
314 609 8463

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:38 PM
To: Potter, Kelly
Subject: FW: New floodplain map

-----Original Message-----
From: Franklin, Lisa
Sent: Wednesday, January 12, 2011 2:52 PM
To: 'alanjdeitch@yahoo.com'
Subject: RE: New floodplain map

Here is the City's FEMA map update webpage :
http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=4370&Itemid=4815

Lisa M. Franklin

-----Original Message-----
From: Alan Deitch [mailto:alanjdeitch@yahoo.com]
Sent: Wednesday, January 12, 2011 11:27 AM
To: Franklin, Lisa
Subject: New floodplain map

Where can I view the new map?

Thx

Alan Deitch

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:40 PM
To: Potter, Kelly
Subject: FW: Flood zone

I think this may have just been a generic realtor question that was left as a voicemail and not necessarily due to the letter.

Lisa

From: Franklin, Lisa
Sent: Friday, January 14, 2011 9:53 AM
To: 'miltong@hasson.com'
Subject: Flood zone

1151 NE Conser is NOT in the 100-yr flood zone
1863 & 1865 Division is NOT in the 100-yr flood zone

Let me know if you have any questions.

Lisa M. Franklin, CE 1, CFM
City of Corvallis - Development Services
Ph: 541.766.6929 Fx: 541.766.6936

Please consider the environment before printing this e-mail.

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:39 PM
To: Potter, Kelly
Subject: FW: ID# 4089 LDT10-00001-Flood Plain Maps

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 8:38 AM
To: 'Dona'
Subject: RE: ID# 4089 LDT10-00001-Flood Plain Maps

The Corvallis Izzys located on 9th Street is located within the 100-yr floodplain. It was with the old maps and it still will be with the new maps. There is no change for this property.

Please let me know if you have any additional questions.

Lisa M. Franklin

From: Dona [mailto:DonaC@izzyspizza.com]
Sent: Tuesday, January 18, 2011 8:29 AM
To: Franklin, Lisa
Subject: ID# 4089 LDT10-00001-Flood Plain Maps

Ms. Franklin, Mr. Jansen, Lessee under the lease with Tripp, Rodney W, TR for the above referenced property wanted me to see if you could tell me whether this property is in the 100-year flood plain. He will be unavailable on January 25 so will not be able to attend the informational meeting.

Dona Carver
Executive Administrator
Izzy's Franchise Systems, LLC
(541) 926-8693, ext 220

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:42 PM
To: Potter, Kelly
Subject: FW: fema floodplain map changes

-----Original Message-----
From: Franklin, Lisa
Sent: Thursday, January 13, 2011 9:40 AM
To: 'David Kailin, Ph.D.'
Subject: RE: fema floodplain map changes

http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=4370&Itemid=4815

Please let me know if you have any questions.

Lisa M. Franklin

-----Original Message-----
From: David Kailin, Ph.D. [mailto:kailin@convergentmedical.com]
Sent: Thursday, January 13, 2011 9:37 AM
To: Franklin, Lisa
Subject: fema floodplain map changes

Dear Lisa,
Per recent notification of FEMA floodplain map changes, I would like to see an image of the new digital floodplain map for my house in Corvallis:
3040 NW Taft Ave; Serial 081889.

I have tried searching on the Benton County Development Dept maps, and I see a message to contact city of Corvallis...
but do not see any floodplain map.

How may I obtain this information?

Thanks!

d.

--
David Kailin, Ph.D.
3040 NW Taft Ave.
Corvallis OR 97330 USA

kailin@convergentmedical.com

Seek simplicity, and distrust it.
Alfred North Whitehead

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Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, January 19, 2011 10:18 AM
To: 'Kathy Hughson'; Franklin, Lisa
Cc: Yaich, Jason; Extrom, Joan
Subject: RE: Public Hearing and FEMA's 100 year Floodplain Map, Property Map:11526AB Tax Lot:2100

Thank you Daniel and Kathleen - The City is legally required to use the County's database for these mailings and it must not be up-to-date for your recent sale. We will send the new owners a courtesy notice.

Kelly

Joan and Jay - Can you please coordinate to send out a notice to the new owners of this property?

Thanks!

From: Kathy Hughson [mailto:kshughson@gmail.com]
Sent: Wednesday, January 19, 2011 9:53 AM
To: Potter, Kelly; Franklin, Lisa
Subject: Public Hearing and FEMA's 100 year Floodplain Map, Property Map:11526AB Tax Lot:2100

Hello,

We received a notice of the map change and public hearing, but we are no longer owners of the property (Property Map:11526AB Tax Lot:21000). The property was sold in August 2010. Notice should be sent to the new owners Vivek Jeevan and Erica Jeevan, at 954 NW Sequoia, Corvallis, OR 97330, if it hasn't already been done.

Thank you,
Daniel & Kathleen Hughson
15790 S Lammer Rd
Oregon City, OR 97045

ATTACHMENT F
APPLICABLE REVIEW CRITERIA

Applicable Comprehensive Plan Policies:

1.2 Local Planning Process

<u>Implementation Tools:</u>
The Comprehensive Plan is implemented through the variety of mechanisms mentioned below:

- **Plans are officially adopted documents used to focus long-range planning for either specific areas or the entirety of the Urban Growth Boundary. Examples of plans include the Comprehensive Plan, facility plans, master plans, and specific area plans.**

- **Regulations include the standards and procedures (see Figure 1.2 - Typical Development Review Process) contained in the Land Development Code and other ordinances. These apply to all land use requests such as land divisions, re-zoning of land, and site development.**

- **The Land Development Code (LDC) is a set of regulations that ensures development is of the proper type, design, and location, and is served by a proper range of public facilities and services. The LDC also ensures that development is in all respects consistent with the goals and policies of the Corvallis Comprehensive Plan.**

1.2.1 The City of Corvallis shall develop and adopt appropriate implementation mechanisms to carry out the policies of the Comprehensive Plan.

3.2.1 The desired land use pattern within the Corvallis Urban Growth Boundary will emphasize:

A. Preservation of significant open space and natural features;

B. Efficient use of land;

C. Efficient use of energy and other resources;

D. Compact urban form;

E. Efficient provision of transportation and other public services; and

F. Neighborhoods with a mix of uses, diversity of housing types, pedestrian scale, a defined center, and shared public areas.

3.2.7 All special developments, lot development options, intensifications, changes or modifications of nonconforming uses, Comprehensive Plan changes, and district changes shall be reviewed to assure compatibility with less intensive uses and potential uses on surrounding lands. Impacts of the following factors shall be considered:

A. Basic site design (i.e., the organization of uses on a site and its relationship to neighboring properties);

B. Visual elements (i.e., scale, structural design and form, materials, etc.);

C. Noise attenuation;

D. Odors and emissions;

E. Lighting;

F. Signage;

G. Landscaping for buffering and screening;

H. Transportation facilities; and

I. Traffic and off-site parking impacts.

4.2.1 Significant natural features within the Urban Growth Boundary shall be identified and inventoried by the City or through the development process. These shall include:

A. Seasonal and perennial streams and other natural drainageways, wetlands, and flood plains;

B. Lands abutting the Willamette and Marys Rivers;

C. Land with significant native vegetation as defined in the Oregon Natural Heritage Plan (1998), which may include certain woodlands, grasslands, wetlands, riparian vegetation, and plant species;

D. Ecologically and scientifically significant natural areas;

E. Significant hillsides;

F. Outstanding scenic views and sites; and

G. Lands that provide community identity and act as gateways and buffers.

4.2.2 Natural features and areas determined to be significant shall be preserved, or have their losses mitigated, and/or reclaimed. The City may use conditions placed upon development of such lands, private nonprofit efforts, and City, State, and Federal government programs to achieve this objective.

4.2.3 The City shall maintain an advisory constraints map that identifies potential development constraints. This map shall be updated periodically as new information becomes available.

4.8.1 Development in the floodway fringe shall be controlled by local regulations in order to minimize potential damage (on-site, upstream, and downstream) to life and property; to allow for transport of flood waters; and to protect the economic, environmental, and open space qualities of the land and adjacent water bodies.

4.8.2 Land designated as 100-year floodplain shall be treated as follows:

A. Development of new buildings on undeveloped lands (where such development does not fall within the definition of infill contained in Article 50) shall be prohibited in the 100-year floodplain of Corvallis streams, with the exception of the Willamette River, the Marys River, and the Millrace. If pre-existing parcels are entirely within the 100-year

floodplain or if this policy renders an otherwise buildable parcel unbuildable, exceptions may be considered to allow limited development. (FP-2)

B. Streets, alleys, driveways, and parking lots on undeveloped lands, with the exception of the Willamette River, the Marys River, and the Millrace, should be located outside the 100-year floodplain and wetlands unless it can be demonstrated that they are constructed in a manner that does not restrict or otherwise alter proper floodplain functions, will cause no harm to the properly functioning condition of the stream, and that no other reasonable option is available. (FP-3)

C. Infill and redevelopment in the 100-year floodplain of Corvallis streams , with the exception of the Willamette River, the Marys River, and the Millrace, shall maintain or improve stormwater functions and floodplain functions existing prior to the proposed infill or redevelopment, using techniques such as flow-through designs, more pervious surface area, and reduced building footprints. Development standards shall be created to allow additions to existing structures consistent with those structures' design, provided the additions fall below the threshold of "substantial improvement" contained in the Land Development Code and are constructed consistent with FEMA standards. (FP-4)

D. Area-specific development standards for the 100-year floodplain of the Marys River, the Willamette Rivers, and the Millrace shall be instituted to maintain stormwater functions, be proportional to the impact of the development on the receiving water bodies, and minimize impacts to other properties.

E. New City infrastructure, including streets and sanitary sewers, should be located outside the 100-year floodplain and wetlands unless it can be demonstrated that they will cause no harm to the properly functioning condition of the stream and that no other reasonable option is available. (FP-8)

4.8.3 Development shall be prohibited within the floodway, except bridges, public utilities and seasonal and other temporary water-related uses that do not significantly alter the patterns of flood water flows.

4.8.4 The City and County shall pursue the completion of mapping of flood plains and floodway (including the City's 0.2 foot floodway) within the Urban Growth Boundary, or require this mapping through the development process.

4.8.5 Development shall be managed for flood control as stated in Comprehensive Plan Section 4.10 - Urban Streams and Other Drainageways.

4.8.6 The City shall continue to regulate development in the South 3rd Street area and other flood-prone areas of the community to mitigate the problem of flooding and to prevent an increased flood hazard in other areas.

4.8.7 The City shall work to facilitate solutions to flooding problems in existing neighborhoods.

4.8.8 The City shall differentiate between natural flooding and urban-created flooding regimes and allow for natural flooding to occur while minimizing urban-created flooding regimes. (QN-11)

4.8.9 The City shall develop a program to acquire land and easements that become available over time within the 100-year floodplain that are cost effective and provide opportunities that best remediate existing, or prevent future, flooding loss or damage. (FP-6)

4.8.10 The City shall develop and implement incentives for floodplain protection, enhancement, and restoration as part of the development process. (FP-9)

4.8.11 The City shall allow for a variety of low impact uses on publicly and privately owned floodplain lands so long as it can be demonstrated that they do not harm floodplain functions. (FP-10)

4.8.12 The City shall work to develop strategies that accommodate housing and other development opportunities that are displaced by floodplain protection measures to ensure a compact development pattern. (FP-11)

4.10.1 Development within the Urban Growth Boundary shall conform to the Corvallis Drainage Master Plan which includes the site-specific provisions included in the 1996 South Corvallis Drainage Master Plan and subsequent updates of these Plans.

4.10.2 Significant riparian lands within the Urban Growth Boundary shall be identified and inventoried by the City or through the development process, and the City shall work to preserve and enhance native stream corridor vegetation on both public and private lands. (QL-6)}

4.10.3 Significant drainageways shall be kept in a natural state to protect tree lines, maintain their natural functions, and enhance native plant species, to the maximum extent practicable.

4.10.4 Within the Urban Growth Boundary, appropriate drainageway dedications and easements adequate for flood protection, conveyance of stormwater, channel access and maintenance protection of riparian environment, and channel migration shall be secured along all open drainageways needed for public conveyance of stormwater, prior to or at the time of development.

4.10.5 The City shall develop stream corridor width and other standards and programs that preserve the properly functioning condition of streams. These standards can be varied by reach or basin and shall be determined based on functional objectives such as:

A. Preservation of the hydrologic conveyance and storage capacity;

B. Allowance for natural channel lateral migration and bank failure;

C. Allowance for channel widening and other channel modification that result from changes in hydrology from future urban development;

D. Proper shading of the stream to maintain or improve water quality;

E. Allowance for a vegetative management strategy that encourages native riparian species;

F. Provision of a pollutant filtering zone for surface runoff;

G. Allowance for natural stream processes to minimize stream channel, bank, and corridor maintenance needs;

H. Buffering of urban uses from stream processes;

I. Provision of a source and delivery of large wood;

J. Preservation of the 0.2-foot floodway; and

K. Preservation or enhancement of habitat.

4.10.6 In order to reduce peak runoff from impervious areas and maintain pre-development flow regimes, the City shall work to adopt standards such as the following:

A. Minimize the proportion of each development site allocated to surface parking and circulation.

B. Minimize the average dimensions of parking stalls.

C. Use pervious materials and alternative designs where applicable, such as infiltration systems.

D. Modify setback requirements to reduce the length of driveways.

E. Promote the use of shared driveways to reduce impervious surface in residential development.

F. Promote disconnection of roof down spouts to reduce runoff going into a piped collection system or the street and encourage storage for reuse.

G. Retain a larger percentage of vegetated area within all types of development to increase rainfall interception.

H. Pursue the use of retention and infiltration facilities where the soils are suitable to control runoff volume, peak flow and promote dry season base flows in streams.

I. Develop sub-surface storage as well as surface detention facilities.

J. Evaluate additional restrictions on cuts in hillsides, especially in areas with near-surface groundwater.

4.10.7 To minimize the negative impacts of development, stormwater runoff after development should be managed to produce no significant reduction of water quality than prior to development unless more appropriate provisions are identified in adopted comprehensive storm water management plans.

4.10.8 Grading and filling in drainageways shall be regulated to prevent negative impact on the channel, floodway and flood plain, riparian habitat, wetlands, and other properties. Where drainageways are disturbed through development, the developer shall return the drainageway to its natural state, to the extent practicable.

4.10.9 Negative impacts on habitat and migration corridors for birds, wildlife, aquatic life, and on open space and the recreation qualities of significant drainageways shall be minimized.

4.10.10 The City shall develop standards and allowable uses within stream corridors. Consideration should be given to at least two levels of protection. The core-protected area is where greater protection is necessary to ensure that stormwater, and other riparian and stream system functions and processes can occur. The transition area is where protection is necessary but where there is a greater opportunity for other uses such as bikeways, detention facilities and bioswales, as long as they do not significantly interfere with the stormwater functions outlined in 4.10.4, above. The transition area would also serve as a buffer for the stream system from more intensive urban development. (SS-6)

4.10.11 The City shall work with Benton County to adopt a cooperative program that implements standards for management of vegetation, such as removal of detrimental vegetation and preservation of beneficial vegetation along significant drainageways within the City Limits and Urban Growth Boundary.

4.10.12 If streams within the Urban Growth Boundary are declared water-quality limited by the State Department of Environmental Quality, appropriate mitigation measures will be adopted.

4.10.13 The City shall develop a program to minimize the conveyance of detrimental sediments and pollutants from public streets into streams and drainageways.

4.10.14 The City shall develop guidelines and evaluate the need for public infrastructure that provides for temporary detention in areas primarily dedicated to other uses, such as parks and open space, parking, and streets. (QN-2)

4.10.15 The City shall prohibit new installations of overhead utility lines along streams where the utility is in conflict with management of vegetation that provides shading. However, utility lines may cross streams. (QL-13)

4.10.16 Where stream shading is not adequate, development shall include planting of trees and/or other vegetation to provide adequate shading. (SS-7)

4.10.17 To manage stormwater drainage and provide direction for developing standards, the City shall establish parameters and/or objectives for allowing new development to use vegetated swales or open channels. (QN-17)

4.10.18 The City shall inventory and identify natural intermittent streams within the Corvallis Urban Growth Boundary that provide important hydrological, water quality and aquatic habitat functions. Those that are used for stormwater functions shall be protected using mechanisms such as drainageway dedications and easements. (SS-1)

4.10.19 The Corvallis stormwater utility shall incorporate existing natural features such as streams and wetlands as a means of managing urban run-off. When using these natural features for urban stormwater needs, stormwater management shall follow the guiding principle of minimizing harm to these natural systems, maintaining the natural functions, and over time, repair any damage associated with past practices. (GP-1)

4.10.20 The City shall promote the protection and enhancement of stream channel structure for deeper pool habitat that provides cooler water refuge areas at times of low stream flows. (QL-14)

4.10.21 Through engineering analysis, the City shall establish stormwater detention and release standards for new development and redevelopment that preserves or restores the properly functioning conditions of the receiving waters. (QN-1)

4.10.22 The City shall consider acquisition of land and easements for future detention facilities. (QN-6)

4.10.23 The City shall determine "beneficial uses" relevant to local streams within the Urban Growth Boundary and monitor if these streams are meeting their beneficial uses. (GP-6)

4.10.24 The City shall develop a set of incentive mechanisms for potential use in implementing stormwater policies and encourage private property owners, non-profits, and other organizations to participate in their implementation. (GP-5)

4.11.3 **Lakes, wetlands, floodway, drainageways and other urban streams are part of the hydrological system and should be managed comprehensively.**

4.13.7 **The City shall work to protect hydrological processes associated with the 100-year floodplain to support self-sustaining levels of native fish, aquatic species, and wildlife populations. (FP-7)**

6.2.1 **The City and County shall balance the diverse and potentially conflicting uses of the Greenway by protecting, enhancing, and maintaining the natural, hydrological, scenic, historical, archeological, agricultural, economic, and recreational qualities of lands along the river.**

6.2.2 **Any development or intensification of use in the Willamette River Greenway shall be subject to a Conditional Development review to assure compliance with adopted Greenway policies and development regulations and standards. The criteria shall:**

A. **Provide for public access;**

B. **Protect significant fish and wildlife habitats;**

C. **Preserve significant scenic qualities and viewpoints;**

D. **Protect air, water, and land resource quality;**

E. **Protect flood-prone areas and significant natural areas and wetlands.**

F. **Protect and enhance riparian vegetation and habitat to assure scenic quality, protection of fish and wildlife, and protection from erosion;**

G. **Protect public safety, and public and private property;**

H. **Protect adjacent private properties from the negative impact of public recreation uses and facilities;**

I. **Protect from the negative impacts of mineral extraction; and**

J. **Protect riverbank stability in a manner that protects fish and wildlife habitat and riparian vegetation.**

6.2.7 **The City shall identify hazardous bank areas and identify suitable, environmentally sensitive mechanisms for riverbank stabilization.**

6.2.8 **The City shall protect and enhance the natural features and flood plain functions of City lands within the Willamette River Greenway on the east side of the river.**

7.2.1 **The City of Corvallis shall continue to comply with or exceed all applicable environmental standards and shall cooperate with State and Federal regulatory agencies in the identification and abatement of local environmental quality problems, including air, water, and noise pollution on an individual and cumulative basis, as per State and Federal regulations.**

7.2.2 **The City shall continue to advocate responsible environmental behavior from its citizens and neighbors.**

7.2.3 **The City shall participate in efforts to improve environmental quality at the local, national, and global levels.**

7.2.6 The City will encourage new development to be sensitive to the environment by having the development avoid significant negative impacts on:

A. Air and water quality;

B. Noise or light pollution; and

C. The hazards related to some types of waste materials.

7.5.2 The City shall continue cooperation with Federal, State, and regional agencies involved with the management and quality of Corvallis' water resources.

7.5.4 The City shall work with the appropriate regulatory agencies to ensure that the Marys River complies with applicable State and Federal water quality standards.

7.5.5 The City shall attempt to limit unnecessary increases in the percentage of Corvallis' impervious surfaces.

7.6.4 The City shall ensure that special precautions or limitations are taken for the storage of hazardous substances, particularly in the 100-year flood plain.

10.2.9 All developments shall comply with adopted utility and facility master plans and the Capital Improvement Plan.

10.7.1 The location of future fire stations should be planned, sited, and developed to maintain the community's high standard of fire protection and ambulance service.

11.2.1 The transportation system shall be planned and developed in a manner which contributes to community livability, recognizes and respects the characteristics of natural features, and minimizes the negative effects on abutting land uses.

11.2.12 The transportation system shall reflect consistency with the Corvallis Comprehensive Plan, land use designations, and regional and statewide transportation planning efforts.

Applicable Land Development Code Sections:

Section 1.2.80 - Text Amendments

1.2.80.01 - Background

This Code may be amended whenever the public necessity, convenience, and general welfare require such amendment and where it conforms with the Corvallis Comprehensive Plan and any other applicable Policies.

1.2.80.02 - Initiation

Initiation of an amendment may be accomplished by one of the following methods:

a. Majority vote of the City Council; or

b. Majority vote of the Planning Commission.

1.2.80.03 - Review of Text Amendments

The Planning Commission and City Council shall review proposed amendments in accordance with the legislative provisions of Chapter 2.0 - Public Hearings.

Applicable Statewide Planning Goals:

Goal 1 - Citizen Involvement - **To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.** It requires each City and County to have a citizen involvement program with six components specified in the goal. It also requires local governments to have a Committee for Citizen Involvement (CCI) to monitor and encourage public participation in planning.

Goal 2 - Land Use Planning - **To establish a land use planning process and Policy framework as a basis for all decision and actions related to use of land and to assure an adequate factual base for such decisions and actions.** Outlines the basic procedures of Oregon's Statewide Planning Program. States that land use decisions are to be made in accordance with a Comprehensive Plan, and that suitable "implementation ordinances" putting the Plan's Policies into effect must be adopted. Requires that plans be based on "factual information"; that local plans and ordinances be coordinated with those of other jurisdictions and agencies; and that plans be reviewed periodically and amended as needed. Goal 2 also contains standards for taking exceptions to Statewide Planning Goals and Guidelines. An exception may be taken when a Statewide Planning Goal cannot or should not be applied to a particular area or situation.

Goal 6 - Air, Water, and Land Resources Quality - **To maintain and improve the quality of the air, water, and land resources of the State.** Requires local Comprehensive Plans and implementing measures to be consistent with State and Federal regulations relative to air, water, and land resources.

Goal 7 - Areas Subject to Natural Disasters and Hazards - **To protect life and property from natural disasters and hazards.** Addresses development in places subject to natural hazards such as floods or landslides. Requires that jurisdictions apply "appropriate safeguards" (flood plain zoning, for example) when planning for development in such areas.

MEMORANDUM

From: Kelly Potter, Senior Planner

To: Planning Commission

Date: February 2, 2011

Re: Additional Written Testimony for FEMA Update Project Legislative amendment to the Land Development Code (LDT10-00001)

Following the release of the January 21, 2011, staff report to the Planning Commission, the City received and/or sent several types of written testimony. This testimony is attached to this memo and includes testimony received and/or sent through 12:00 noon today. Any testimony received after 12:00 pm today will be forwarded to the Planning Commission under separate cover.

Many of the attached pieces of testimony are personalized maps that staff created at the request of property owners. Some property owners requested that hard copies be sent to them in the mail. Those particular maps are contained at the end of the testimony attached to this memo. Other property owners requested that pdfs of these maps be sent to them via email.

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Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, January 12, 2011 2:58 PM
To: 'James Baglien'
Subject: RE: Proposed Code changes for FEMA requirements

Hello James - The answer to your question is "no."

Kelly

-----Original Message-----
From: James Baglien [mailto:jbaglien@gmail.com]
Sent: Wednesday, January 12, 2011 2:05 PM
To: Potter, Kelly
Subject: Proposed Code changes for FEMA requirements

In the materials I received today, I saw reference to changes in City code only, not County.

We are in Benton County, within the UGB and bordering the City boundary line: Map # 11523AB, Tax Lots 2400 & 2500.

Would implementation of these City Code changes have any immediate relevance for us?

Thanks,

James S. Baglien

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 13, 2011 12:49 PM
To: 'ljmaki33@comcast.net'
Subject: RE: FEMA Floodplain Maps

Hello Judith and Leonard -

You're most welcome!

Kelly

From: ljmaki33@comcast.net [mailto:ljmaki33@comcast.net]
Sent: Thursday, January 13, 2011 12:41 PM
To: Potter, Kelly
Subject: Re: FEMA Floodplain Maps

Kelly -

Thank you for your very prompt response. We appreciated your clarifying what was a somewhat confusing bureaucratic document.

Needless to say, we have no plans to further develop our property or encroach upon the stream bed.

Judith & Leonard

----- Original Message -----
From: "Kelly Potter" <Kelly.Potter@ci.corvallis.or.us>
To: ljmaki33@comcast.net
Sent: Thursday, January 13, 2011 10:25:01 AM
Subject: RE: FEMA Floodplain Maps

Hello Judith and Leonard - You are correct in your assessment and were notified because you were so close to that stream. Your insurance carrier will NOT be notified because FEMA has not designated this area as a 100-year floodplain. You will NOT be required to purchase flood insurance. That is entirely up to you.

You really don't have any action to do at this point. If that stream was located in a manner that may cause flooding impacts to your property, and you wanted to redevelop or further develop your property (both unlikely, since you are already developed to urban standards), then the Floodplain Administrator would look at your situation and see if a floodplain study was needed. I think it highly unlikely that this scenario would come up in your particular case. Nevertheless, please feel free to contact me with any additional questions.

Kelly

From: ljmaki33@comcast.net [mailto:ljmaki33@comcast.net]
Sent: Thursday, January 13, 2011 8:53 AM
To: Potter, Kelly
Subject: FEMA Floodplain Maps

Dear Mr. Potter,

We recently received the notice regarding proposed changes in the Land Development Code to address FEMA requirements.

Our property (Map: 11521CD, Tax Lot: 6000) was designated as "May be Affected" by LDT 10-00001. The notice states that no FEMA study has been done and that future study will be required to determine the extent of any 100-year floodplain boundaries.

A small stream (winter only) exists on adjacent property, but it is clear from a cursory study of the terrain that there is no potential for damage to our property due to a 100-year flood.

Some immediate questions arise. Will our insurance carrier be notified that our property is in a floodplain even though no studies have been performed relative to our property? Will we be required to purchase National Flood Insurance? What action, if any will be required on our part at this time?

Sincerely,

Judith M. and Leonard M. Maki
2721 NW Romancier Dr.
Corvallis, OR 97330

541-752-6587

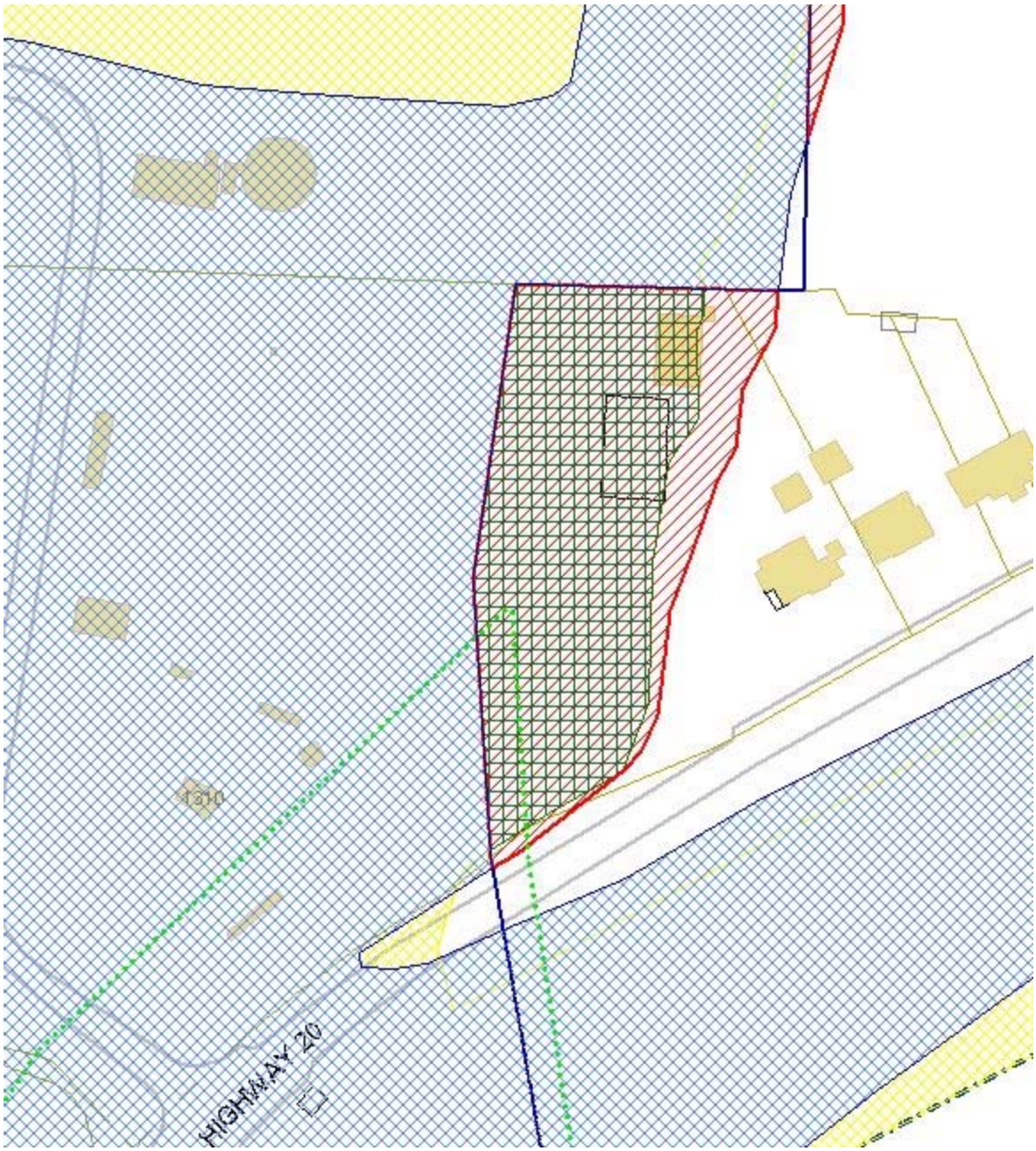
Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 13, 2011 10:13 AM
To: 'Bill Ten Pas'
Cc: LEWIS Toby A
Subject: RE: meeting and FEMA maps

Hello Bill and Kathy - You aare correct that you are outside the City limits, but received a notice because you directly abut the City. We mailed notices to anyone in the City and anyone abutting (just to be absolutely sure). Probably no need for you to attend our open house, since you are subject to Benton County regulations and I have included a map of the area where your properties are below.

Just FYI, the map below shows the old verses new floodplain in the area of your properties. The red cross-hatch indicates the new FEMA 100-year Floodplain boundary and the Green cross-hatch indicates the old/current FEMA 100-year Floodplain boundary.

As far as whether or not you will be subject to the floodplain regulations, the map indicates that you will be. However, if you have formally gone through the LOMA or LOMR process with FEMA to be exempted from the floodplain, then I suggest you work with Toby Lewis at Benton County on that.



From: Bill Ten Pas [mailto:tenpasb@odscompanies.com]
Sent: Thursday, January 13, 2011 6:53 AM
To: Potter, Kelly; Franklin, Lisa
Cc: btenpas@comcast.net
Subject: meeting and FEMA maps

We had a land survey that exempted us from required flood insurance and FEMA regulations. We just received a notice of a February 2nd meeting to implement new FEMA maps. We would ask two things.

1. Will the meeting have material indicating new areas covered in the new maps. Specifically our properties.
2. Will our properties, that had previously been exempted, now be included in the FEMA regulations.

Our properties are at 1330 and 1336 NE 2nd Street in Corvallis. We are not in the city limits.

Thank you for your help.

Bill and Kathy Ten Pas

William Ten Pas
President
ODS
(503) 228-6554
http://www.odscompanies.com

This message is intended for the sole use of the individual and entity to whom it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If you are not the intended addressee, nor authorized to receive for the intended addressee, you are hereby notified that you may not use, copy, disclose or distribute to anyone the message or any information contained in the message. If you have received this message in error, please immediately advise the sender by reply email and delete the message.

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:38 PM
To: Potter, Kelly
Subject: FW: floodplain map changes

From: Franklin, Lisa [mailto:Lisa.Franklin@ci.corvallis.or.us]
Sent: Tuesday, January 18, 2011 3:54 PM
To: Steve Allen
Subject: RE: floodplain map changes

The floodplain boundary in all these locations is changing. Fortunately, it is in your favor. I printed the maps for these properties for you and will gladly spend a few minutes going over them with you and what the changes really mean to you. Would you still like to make an appointment? If so, when works for you?

Lisa M. Franklin

From: Steve Allen [mailto:Steve@briarridgeliving.com]
Sent: Tuesday, January 18, 2011 1:50 PM
To: Franklin, Lisa
Subject: RE: floodplain map changes

Lisa:

1. Object ID 8959 BACO 11 5 35 BD Tax lot 106
2. Object 12234 Oak Park Apts. 12 5 03 AC #2300
3. Object 5271 ABI Enterprises 11 5 25 BO #2300

Thanks,
Steve

From: Franklin, Lisa [mailto:Lisa.Franklin@ci.corvallis.or.us]
Sent: Tuesday, January 18, 2011 1:29 PM
To: Steve Allen
Subject: RE: floodplain map changes

Of course you can make an appointment and we can pull up the properties on the map. Or, if you would like, you can send me a list of your addresses and I will pull them up and see if you are even impacted by the change. If you are, then we could schedule something to go over the changes.

Weds afternoon or Friday any time works for this week.

Lisa M. Franklin

From: Steve Allen [mailto:Steve@briarridgeliving.com]
Sent: Tuesday, January 18, 2011 1:17 PM
To: Franklin, Lisa
Subject: floodplain map changes

1/18/11 Dear Lisa;

I recently received three notices of the floodplain change process. Can I make an appointment to see you and go over the map changes to see what the impact may be on our property ? 15-30 minutes estimated.

Steve Allen

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:37 PM
To: 'Tim Dale'
Cc: Potter, Kelly
Subject: RE: Floodplain changes to my property

Tim,

The floodplain boundary for your site is barely changing. It will not directly impact you since your structure will still be the same distance from the 100-yr floodplain, which is all that is regulated. The 500-year boundary does encroach more onto your property, but it is not regulated and does not require insurance or special design standards.

I have not heard that insurance will change due to this, especially since you are not directly impacted. However, insurance rates do change regularly. This is more of an insurance question and is not my area, but I have not heard anything.

Land use classification is not changing. This is strictly a floodplain change at this time.

The map is available on our web site but it is extremely slow last I checked.

http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=4370&Itemid=4815

Please let me know if you have any additional questions.

Lisa M. Franklin, CE 1, CFM
City of Corvallis - Development Services
Ph: 541.766.6929 Fx: 541.766.6936

Please consider the environment before printing this e-mail.

From: Tim Dale [mailto:slimtail@hotmail.com]
Sent: Tuesday, January 18, 2011 4:23 PM
To: Franklin, Lisa
Subject: Floodplain changes to my property

Dear Lisa Franklin,

I have been reading over the information sent out by the City of Corvallis informing us of changes in the floodplain, in particular the remapping by FEMA. Contact information list you for Floodplain Map information.

Our home is designated as "WILL BE AFFECTED". I am guessing this means MORE of the property will be classified as in the floodplain. My questions thus far:

1. Where can I see the updated FEMA/FIRM map? I want to see how much of change the new Map depicts.

2. Should a rate change be expected? (Although this is more an Insurance Provider question.)

3. Does land use classification change? Our house is residential in the cilty limits.

Thanks for any info you can share concerning my questions.

Tim Dale
3020 SW Morris Ave
314 609 8463

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:38 PM
To: Potter, Kelly
Subject: FW: New floodplain map

-----Original Message-----
From: Franklin, Lisa
Sent: Wednesday, January 12, 2011 2:52 PM
To: 'alanjdeitch@yahoo.com'
Subject: RE: New floodplain map

Here is the City's FEMA map update webpage :
http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=4370&Itemid=4815

Lisa M. Franklin

-----Original Message-----
From: Alan Deitch [mailto:alanjdeitch@yahoo.com]
Sent: Wednesday, January 12, 2011 11:27 AM
To: Franklin, Lisa
Subject: New floodplain map

Where can I view the new map?

Thx

Alan Deitch

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:40 PM
To: Potter, Kelly
Subject: FW: Flood zone

I think this may have just been a generic realtor question that was left as a voicemail and not necessarily due to the letter.

Lisa

From: Franklin, Lisa
Sent: Friday, January 14, 2011 9:53 AM
To: 'miltong@hasson.com'
Subject: Flood zone

1151 NE Conser is NOT in the 100-yr flood zone
1863 & 1865 Division is NOT in the 100-yr flood zone

Let me know if you have any questions.

Lisa M. Franklin, CE 1, CFM
City of Corvallis - Development Services
Ph: 541.766.6929 Fx: 541.766.6936

Please consider the environment before printing this e-mail.

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:39 PM
To: Potter, Kelly
Subject: FW: ID# 4089 LDT10-00001-Flood Plain Maps

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 8:38 AM
To: 'Dona'
Subject: RE: ID# 4089 LDT10-00001-Flood Plain Maps

The Corvallis Izzys located on 9th Street is located within the 100-yr floodplain. It was with the old maps and it still will be with the new maps. There is no change for this property.

Please let me know if you have any additional questions.

Lisa M. Franklin

From: Dona [mailto:DonaC@izzyspizza.com]
Sent: Tuesday, January 18, 2011 8:29 AM
To: Franklin, Lisa
Subject: ID# 4089 LDT10-00001-Flood Plain Maps

Ms. Franklin, Mr. Jansen, Lessee under the lease with Tripp, Rodney W, TR for the above referenced property wanted me to see if you could tell me whether this property is in the 100-year flood plain. He will be unavailable on January 25 so will not be able to attend the informational meeting.

Dona Carver
Executive Administrator
Izzy's Franchise Systems, LLC
(541) 926-8693, ext 220

Potter, Kelly

From: Franklin, Lisa
Sent: Tuesday, January 18, 2011 4:42 PM
To: Potter, Kelly
Subject: FW: fema floodplain map changes

-----Original Message-----
From: Franklin, Lisa
Sent: Thursday, January 13, 2011 9:40 AM
To: 'David Kailin, Ph.D.'
Subject: RE: fema floodplain map changes

http://www.ci.corvallis.or.us/index.php?option=com_content&task=view&id=4370&Itemid=4815

Please let me know if you have any questions.

Lisa M. Franklin

-----Original Message-----
From: David Kailin, Ph.D. [mailto:kailin@convergentmedical.com]
Sent: Thursday, January 13, 2011 9:37 AM
To: Franklin, Lisa
Subject: fema floodplain map changes

Dear Lisa,
Per recent notification of FEMA floodplain map changes, I would like to see an image of the new digital floodplain map for my house in Corvallis:
3040 NW Taft Ave; Serial 081889.

I have tried searching on the Benton County Development Dept maps, and I see a message to contact city of Corvallis...
but do not see any floodplain map.

How may I obtain this information?

Thanks!

d.

--
David Kailin, Ph.D.
3040 NW Taft Ave.
Corvallis OR 97330 USA

kailin@convergentmedical.com

Seek simplicity, and distrust it.
Alfred North Whitehead

NOTICE: This E-mail (including attachments) is confidential,and may be privileged.
If you are not the intended recipient: please be aware that any retention, dissemination, distribution, or copying of this communication is prohibited.
Please reply to the sender that you have received the message in error, then delete it. Thank you for helping to maintain privacy.

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, January 19, 2011 10:18 AM
To: 'Kathy Hughson'; Franklin, Lisa
Cc: Yaich, Jason; Extrom, Joan
Subject: RE: Public Hearing and FEMA's 100 year Floodplain Map, Property Map:11526AB Tax Lot:2100

Thank you Daniel and Kathleen - The City is legally required to use the County's database for these mailings and it must not be up-to-date for your recent sale. We will send the new owners a courtesy notice.

Kelly

Joan and Jay - Can you please coordinate to send out a notice to the new owners of this property?

Thanks!

From: Kathy Hughson [mailto:kshughson@gmail.com]
Sent: Wednesday, January 19, 2011 9:53 AM
To: Potter, Kelly; Franklin, Lisa
Subject: Public Hearing and FEMA's 100 year Floodplain Map, Property Map:11526AB Tax Lot:2100

Hello,

We received a notice of the map change and public hearing, but we are no longer owners of the property (Property Map:11526AB Tax Lot:21000). The property was sold in August 2010. Notice should be sent to the new owners Vivek Jeevan and Erica Jeevan, at 954 NW Sequoia, Corvallis, OR 97330, if it hasn't already been done.

Thank you,
Daniel & Kathleen Hughson
15790 S Lammer Rd
Oregon City, OR 97045

Potter, Kelly

From: Larry Hunnemuller [larryhunne@comcast.net]
Sent: Monday, January 24, 2011 5:11 PM
To: Potter, Kelly
Subject: RE: Open House and planning commission meeting

Thank you for your very timely response; I think I will wait for the surveyors training you mentioned.
Thanks again
Larry

From: Potter, Kelly [mailto:Kelly.Potter@ci.corvallis.or.us]
Sent: Monday, January 24, 2011 1:38 PM
To: Larry Hunnemuller
Subject: RE: Open House and planning commission meeting

Hello Larry - We are going to be setting up a special surveyors training that either FEMA or the State puts on for us. That might benefit you more from a surveyor's point of view. The open house tomorrow night is aimed at property owners in the City of Corvallis who received a public notice from us about our upcoming Planning Commission public hearing. The public hearing is being held to address a City of Corvallis Land Development Code Text Amendment that will fully implement the federal National Flood Insurance Program (NFIP) floodplain regulations. We will be explaining the very basics of this Text Amendment tomorrow night and then breaking up into a very informal setting so that property owners can talk one-on-one with staff about the Text Amendment and also look up their property on a computer to compare old floodplain boundaries with the new ones.

I leave it up to you as to whether or not you would like to attend. If you have further questions about the subject matter of the open house, please feel free to give me a call and we can talk about it further and then you can decide whether or not you would like to attend.

Kelly Potter
(541) 766-6908

From: Larry Hunnemuller [mailto:larryhunne@comcast.net]
Sent: Monday, January 24, 2011 1:33 PM
To: Potter, Kelly
Subject: Open House and planning commission meeting

Kelly,
I am a licensed Land Surveyor as well as an affected land owner. I have been doing Elevation Certificates and LOMA'S in Linn County working with the new flood maps and the datum change from 29 -47 to 1988. Do You think it would benefit me to attend either gathering is everything pretty much the same as Linn County.?
Thank You
Larry Hunnemuller P.L.S.

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, January 26, 2011 4:59 PM
To: 'kathykz@comcast.net'
Subject: PDF of 1321 NW 17th

Attachments: 1321 NW 17th - Kopczynski.pdf

Hello Kathy -

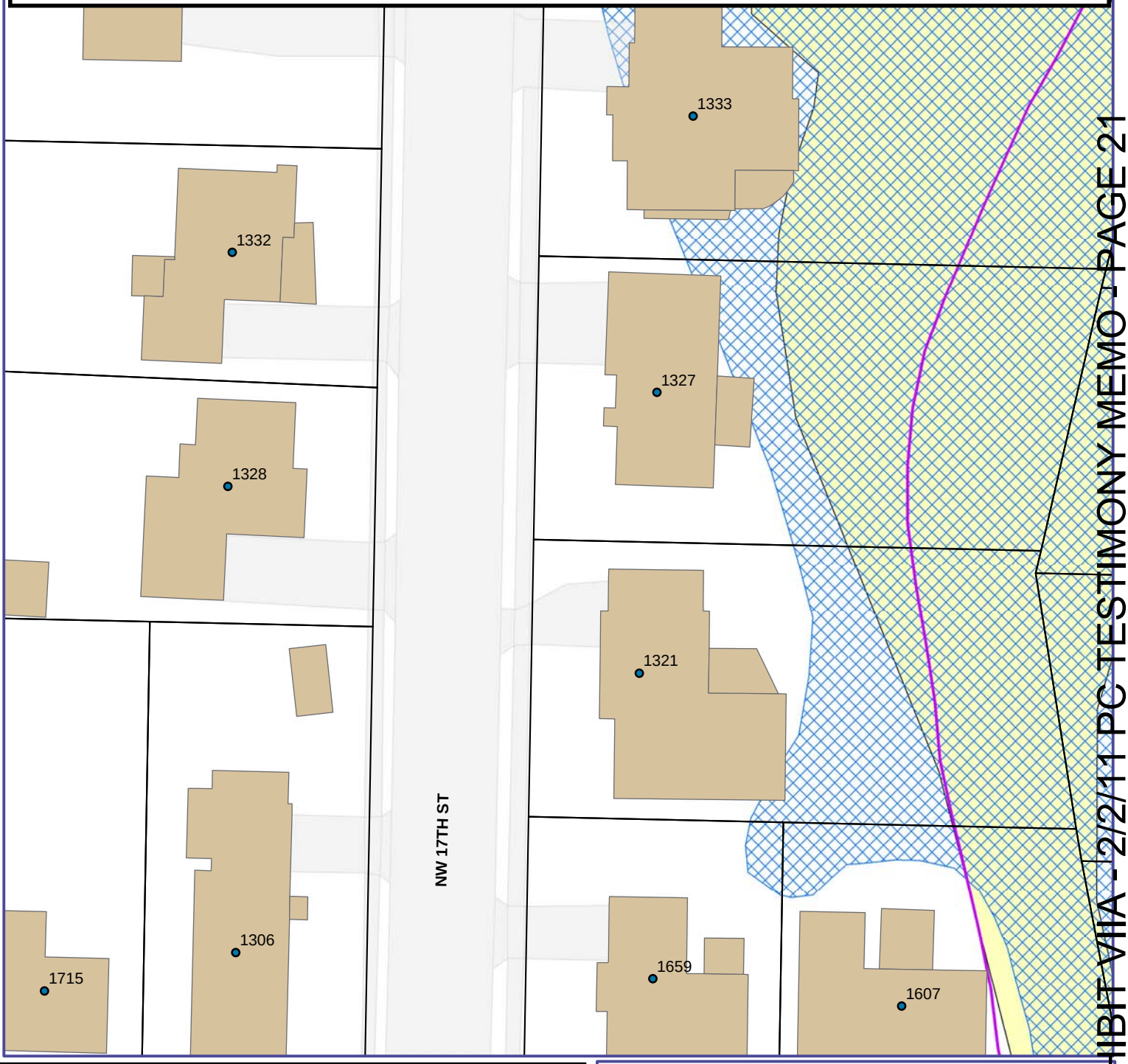
Here is the pdf of your address. Thanks so much for coming last night and please let us know if we can answer any further questions for you.

Kelly

1321 NW
- Kopczynski.p

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339
(541) 766-6908
kelly.potter@ci.corvallis.or.us

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
(FEMA has not yet conducted studies on properties that contain streams, but are not labeled as "High" or "Partial" protection. For those properties, 100-yr. Floodplain studies may be required as part of future development proposals.)



Data on these maps are based on aerial photography and other information sources, which may not be as precisely accurate as you need for floodplain insurance purposes. If floodplain boundaries are very close to structures on this map, check with Engineer Lisa Franklin {(541) 766-6908 or lisa.franklin@ci.corvallis.or.us} to see if she can assist you in more definitively locating the features. Ultimately, a property survey is the most accurate way to locate them.

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

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(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 9:00 AM
To: 'douglas97330@msn.com'
Subject: Pdf of 585 SE Vera Ave

Attachments: 585 SE Vera Ave - Horning.pdf

Hello Noreen - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

585 SE Vera
- Horning.pd

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339
(541) 766-6908
kelly.potter@ci.corvallis.or.us

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS

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Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 8:16 AM
To: 'Tony Howell'; Extrom, Joan
Cc: thowell@co.linn.or.us
Subject: RE: Planning Commission Agenda

Hi Tony - This is a legislative hearing. See you next week!

Kelly

From: Tony Howell [mailto:howellt@peak.org]
Sent: Wednesday, January 26, 2011 9:50 PM
To: Extrom, Joan; Potter, Kelly
Cc: thowell@co.linn.or.us
Subject: RE: Planning Commission Agenda

Kelly,

Will this (FEMA hearing) be legislative or quasi-judicial? Just so I know whether to avoid others' discussions of it outside the hearing, or if I'll need to declare those discussions (e.g., at CCI). Thanks.

Tony

Tony Howell
2030 SE DeBord Street
Corvallis, OR 97333
(H) 541-753-9318
(C) 541-760-3828

From: Extrom, Joan [mailto:Joan.Extrom@ci.corvallis.or.us]
Sent: Wednesday, January 26, 2011 3:53 PM
Subject: Planning Commission Agenda

Attached is the Planning Commission Agenda for the February 2, 2011, meeting, and the Proposed Meeting Schedule.

<<Planning Commission Agenda.pdf>>

The meeting begins at 7 p.m. with a Public Hearing for the Land Development Code Text Amendment to Address FEMA Floodplain Maps and Regulations (LDT10-00001).

Link to the staff report:

http://archive.ci.corvallis.or.us/docview.aspx?id=290816

For questions about the staff report, contact Senior Planner Kelly Potter (541.766.6908 or mailto:kelly.potter@ci.corvallis.or us)

Joan Extrom
Administrative Specialist, Planning Division
Corvallis Community Development Department
541-766-6908

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 9:22 AM
To: 'dougsparker@comcast.net'
Subject: Pdf of 2041 NW Arthur Place

Attachments: 2041 NW Arthur Place - Parker.pdf

Hi Doug - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

2041 NW
ır Place - Park

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339
(541) 766-6908
kelly.potter@ci.corvallis.or.us

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
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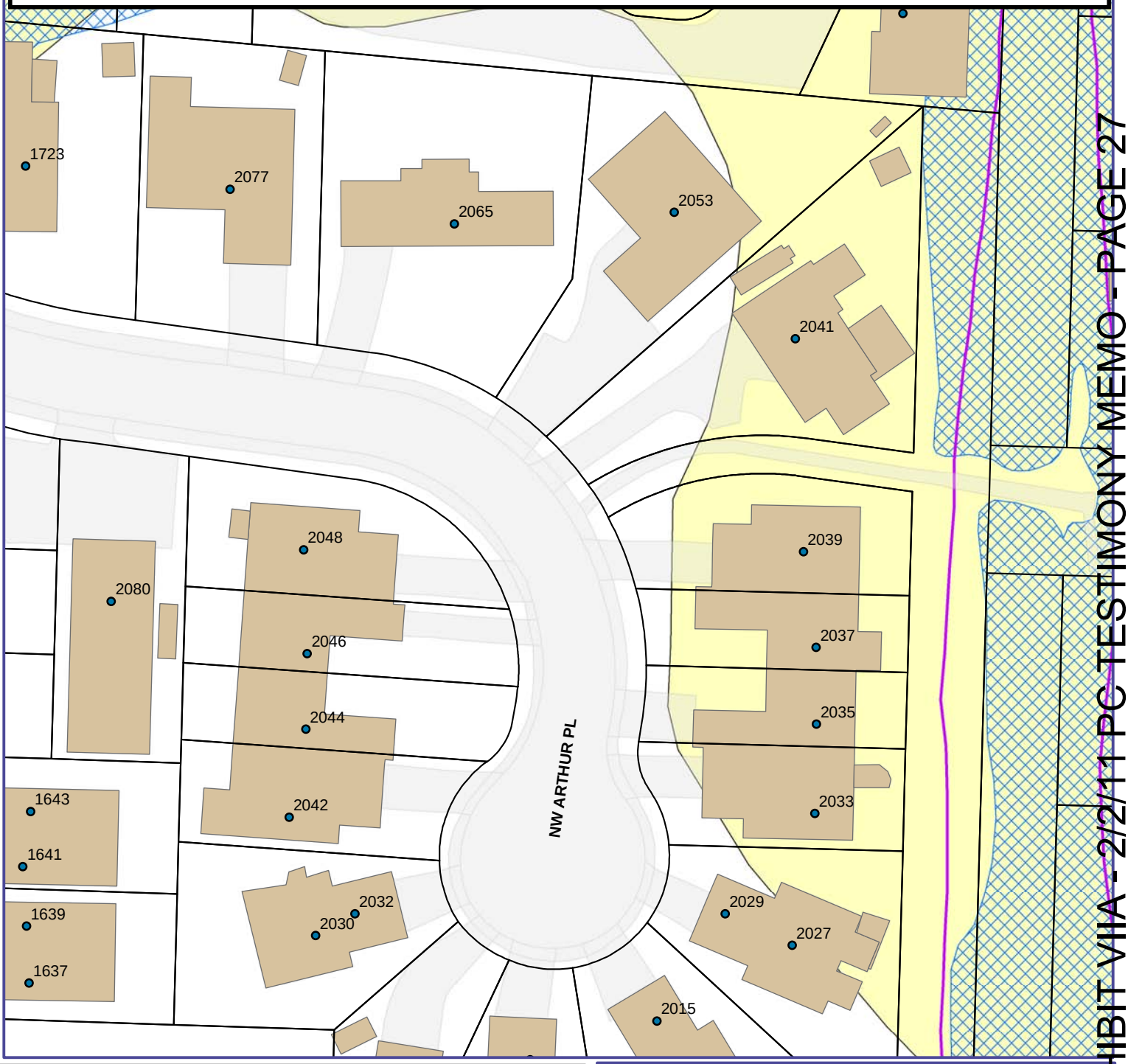

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541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 8:53 AM
To: 'robin.powel@gmail.com'
Subject: Pdf of 3347 NW Walnut Blvd.

Attachments: 3347 NW Walnut Blvd - Powel.pdf

Hello Robin - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

3347 NW
ıt Blvd - Powe

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
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(541) 766-6908
kelly.potter@ci.corvallis.or.us

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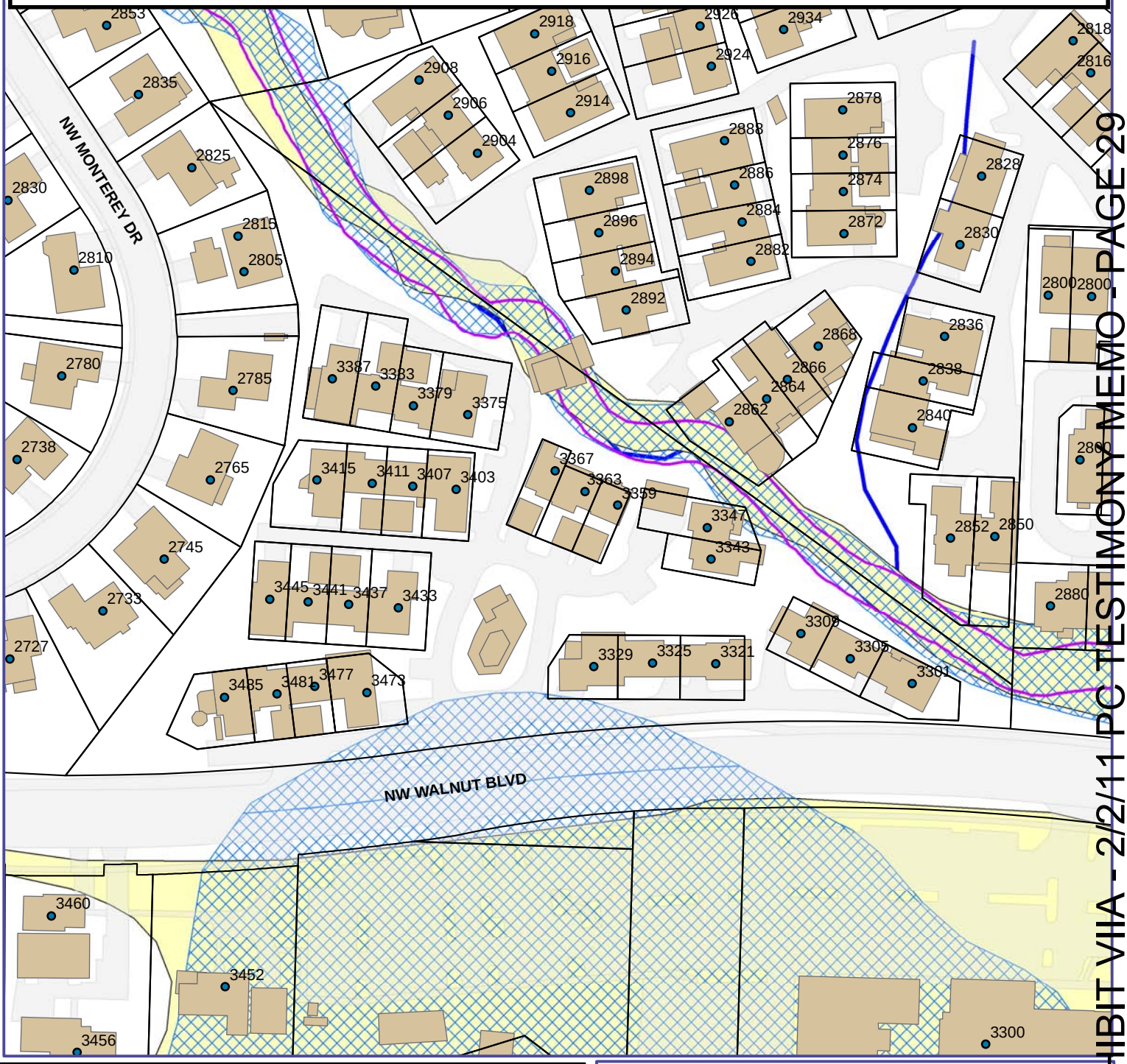

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PLANNING@CI.CORVALLIS.OR.US

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 8:30 AM
To: 'reinert3099@comcast.net'
Subject: PDF of your property

Attachments: 300 NE Rennie Place - Reinert.pdf

Hello David - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

300 NE
e Place - Rein

Kelly Potter, Senior Planner
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Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 3:55 PM
To: 'iriscat@peak.org'
Subject: FW: Pdf of 1465 NW 15th

Attachments: 1465 NW 15th - Upton.pdf

Hello Brad - Here is the email I sent out this morning.

Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 9:13 AM
To: 'irisca7@peak.org'
Subject: Pdf of 1465 NW 15th

Hello Brad - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Lisa Franklin will be following up to provide you with the elevation data that you requested. If you need to reach her directly, her contact information is (541) 766-6929 or lisa.franklin@ci.corvallis.or.us.

Kelly

1465 NW Upton.pdf (9

Kelly Potter, Senior Planner
City of Corvallis Planning Division
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P.O. Box 1083
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(541) 766-6908
kelly.potter@ci.corvallis.or.us

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS

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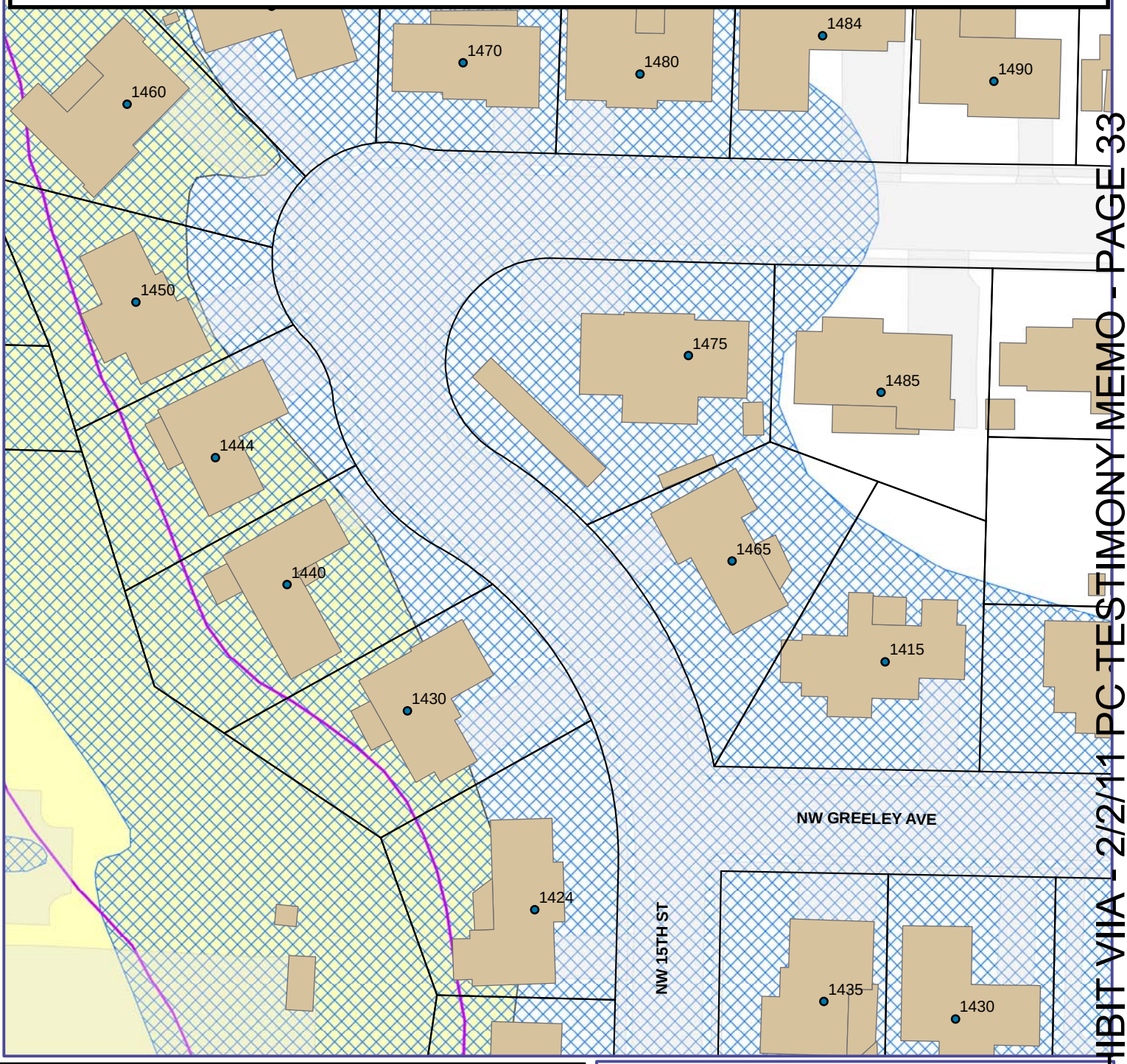

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Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

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OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

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- PARTIAL
- Streams

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PLANNING@CI.CORVALLIS.OR.US

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 2:58 PM
To: 'edw@peak.org'
Subject: Pdf of floodplain info

Attachments: 2715 NW Glenwwod Place - Walsh.pdf

Hello Edward -

Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

2715 NW
wod Place - W

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
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(541) 766-6908
kelly.potter@ci.corvallis.or.us

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
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PLANNING@CI.CORVALLIS.OR.US

Legend
- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)
PROTECTION
- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)
Protection Level
- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 9:42 AM
To: 'watrous4@comcast.net'
Subject: Pdf of 2800 NW 29th

Attachments: 2800 NW 29th - Watrous.pdf

Hello Ellen - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

2800 NW
- Watrous.pdf

Kelly Potter, Senior Planner
City of Corvallis Planning Division
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(541) 766-6908
kelly.potter@ci.corvallis.or.us

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Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 8:47 AM
To: 'bwettengel@comcast.net'
Subject: Pdf of NE Lancaster

Attachments: NE Lancaster - Wettengel.pdf

Hello Bill - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

NE Lancaster
Wettengel.pdf

Kelly Potter, Senior Planner
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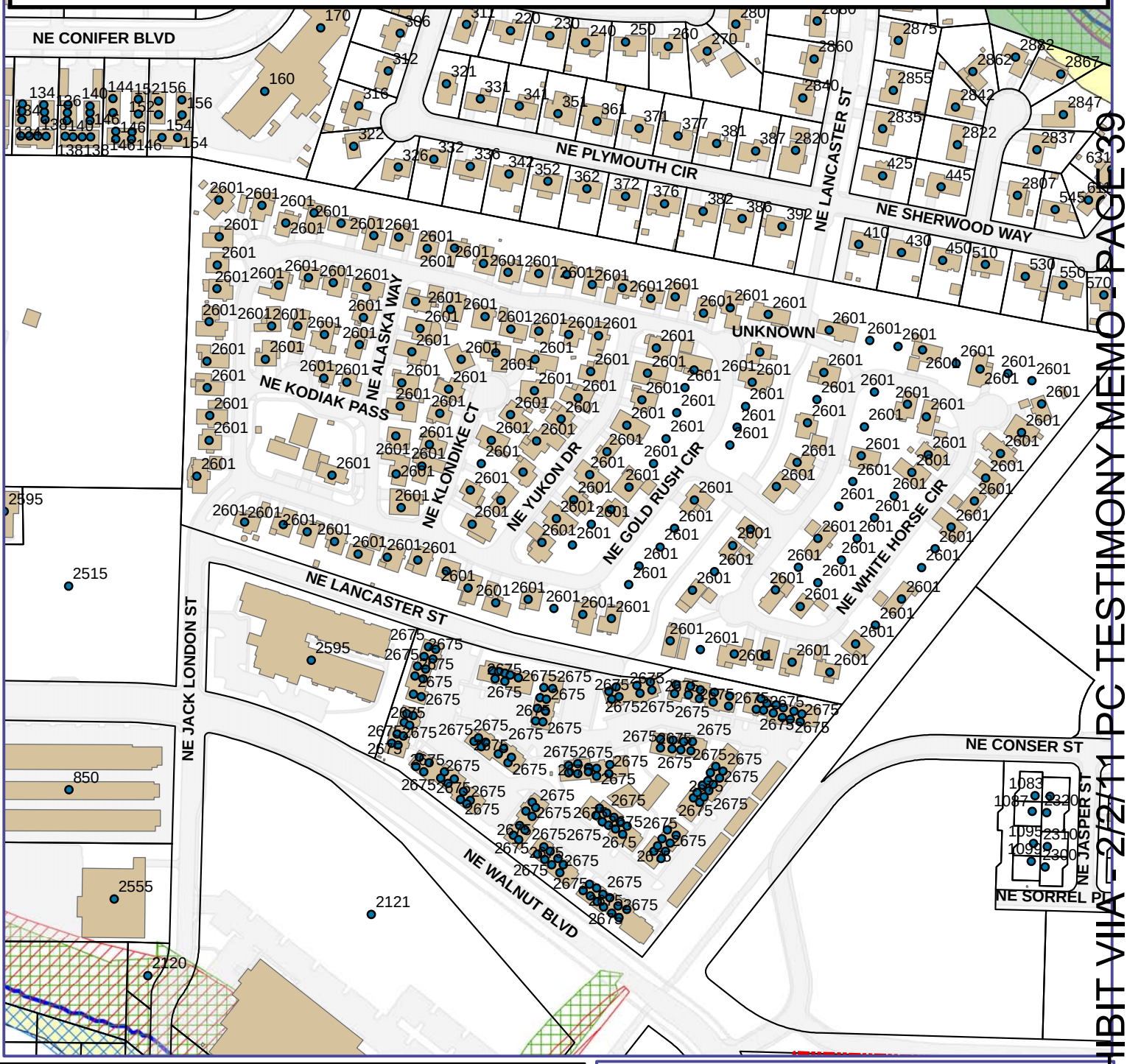

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Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

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- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, January 27, 2011 2:39 PM
To: 'JFW100@comcast.net'
Subject: Pdf of 1464 NW 17th - floodplain information

Attachments: 1464 NW 17th - Wilson.pdf

Hello John - Attached is a pdf of the floodplain information for your property. Thanks so much for attending our open house and please let us know if we can answer any additional questions for you.

Kelly

1464 NW
- Wilson.pdf (

Kelly Potter, Senior Planner
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kelly.potter@ci.corvallis.or.us

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PLANNING@CI.CORVALLIS.OR.US

Legend
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- City Limits
- Two Tenths Flooday Protections

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PROTECTION
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- PARTIAL

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Protection Level
- HIGH
- PARTIAL
- Streams

Potter, Kelly

From: Potter, Kelly
Sent: Tuesday, February 01, 2011 9:51 AM
To: 'Steve Starcevich'
Subject: RE: Sequoia Creek floodplain questions
Attachments: 972 NW Sequoia - Starcevich.pdf

Good Morning Steve -

I've attached a pdf of your property for your reference and to better show the differences in the "old/current" 100-year FEMA Floodplain (uses paper maps) versus the new FEMA 100-year Floodplain (uses digital maps) that will take effect on June 2, 2011. If you look at the attached graphic, you'll be able to see that the "old/current" 100-year FEMA Floodplain did not touch or cross onto your property at 972 NW Sequoia. **However, the 0.2-ft. Floodway for Sequoia Creek has always crossed over the southern portion of your site.** The 0.2-ft. Floodway boundaries were established through local engineering studies. The fact that the "old/current" 100-year FEMA Floodplain did not encompass the identified 0.2-ft. Floodway is likely a function of the "old/current" FEMA maps being depicted on paper maps which were not as accurate as taking that same information and depicting it on digital maps using 2-ft. contour topography.

The new 100-year FEMA Floodplain Maps use local digital 2-ft. contour lines and the FEMA maps are depicted digitally. They are more accurate and that is why now the new 100-year FEMA Floodplain Maps encompass the 0.2-ft. Floodway along Sequoia Creek and cross over onto the southern portion of your site. You are correct that the area is "Partial Protection Floodplain," but it is also 0.2-ft. Floodway. Because the Floodway is involved, there are stricter standards that currently apply and will continue to apply after June 2, 2011.

The reason you "will be affected" by the land use regulation changes is that as part of FEMA's nationwide map modernization project (moving to digital floodplain maps), reviews were done of local floodplain ordinances to make sure they were entirely in line with the federal floodplain regulations. Such a review was done for the City of Corvallis floodplain regulations. While much of the federal regulations were already addressed by the City's floodplain standards, there are certain federal regulations that were not addressed and must be in order for the City to remain eligible for the National Flood Insurance Program (NFIP). The portion of your site that is subject to the federal and City floodplain regulations is the portion that is within the 0.2-ft. Floodway and/or the new FEMA 100-year Floodplain. Thus, you will be affected by the new regulations. You can find a summary of the new regulations by going to www.ci.corvallis.or.us and clicking on the link called "FEMA - Floodplain Map Modernization." That link has all the regulation changes and a good start would be to scroll down the page and watch the powerpoint presentation that staff used for an open house last week. That will provide you with a general overview.

As to whether or not you will be required by the banks to buy flood insurance, here is the information. If you have a mortgage and owe more than $5,000, the answer is "yes." If you

own your home outright or owe less than $5,000, then the answer is "no." The City regulations do not delve into flood insurance. Nevertheless, it is a very important topic because FEMA is now leaning on the banks to require flood insurance and they, in turn, will be leaning on folks to obtain it. We do have some ability to give you information on the subject. Please see the powerpoint presentation on the website for an overview of some of the information.

If you have any nmore questions, please don't hesitate to call me at (541) 766-6908.

Kelly Potter
Senior Planner
City of Corvallis
(541) 766-6908
kelly.potter@ci.corvallis.or.us

From: Steve Starcevich [mailto:steve.starcevich6@gmail.com]
Sent: Monday, January 31, 2011 1:31 PM
To: Potter, Kelly
Subject: Fwd: Sequoia Creek floodplain questions

Hi Kelly: I imagine you and the city are being inundated with questions about the new FEMA deal. I'm curious to know how our house (address below) will be affected by the new regulations. I looked at the map of the 100 year floodplain for our house. We are in the Partial Floodplain but it looks like the floodplain determination has not changed much in our area. To my surprise then, the letter of public notice says we will be affected by LDT10-00001. However, it failed to tell us how we will be affected.

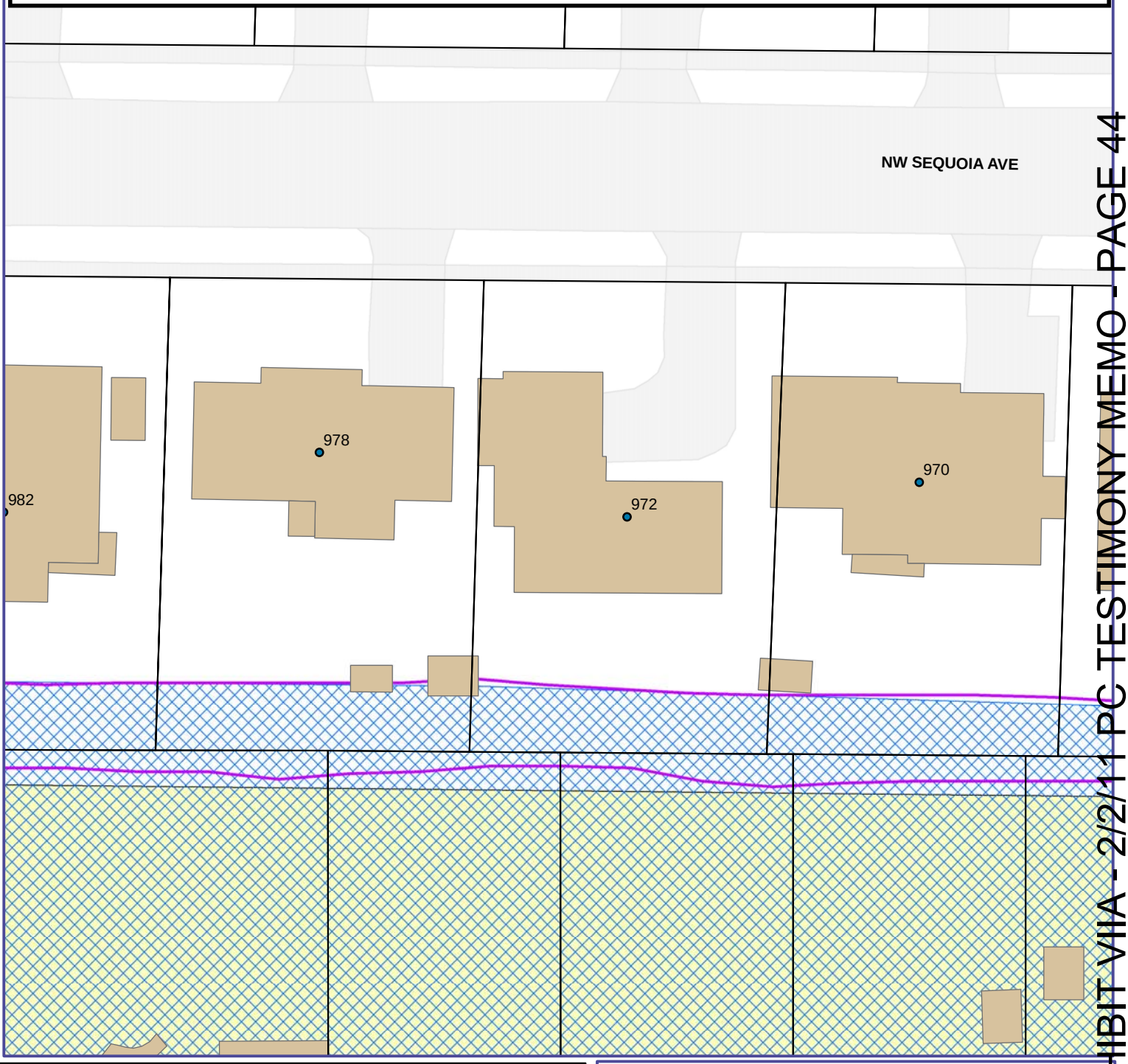
I'm not sure if this has been decided yet, but my big question is this: Are we going to have buy flood insurance? If not, when we sell it, will the next owner have to pay flood insurance?

Thanks for your help,

Steve and Leigh Ann Starcevich

972 NW Sequoia Avenue
Corvallis OR 97330
Map: 11526AB
Taxlot: 2800

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
(FEMA has not yet conducted studies on properties that contain streams, but are not labeled as "High" or "Partial" protection. For those properties, 100-yr. Floodplain studies may be required as part of future development proposals.)



Data on these maps are based on aerial photography and other information sources, which may not be as precisely accurate as you need for floodplain insurance purposes. If floodplain boundaries are very close to structures on this map, check with Engineer Lisa Franklin {(541) 766-6908 or lisa.franklin@ci.corvallis.or.us} to see if she can assist you in more definitively locating the features. Ultimately, a property survey is the most accurate way to locate them.

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

CORVALLIS
ENHANCING COMMUNITY LIVABILITY

CORVALLIS PLANNING DIVISION
2300 NW WALNUT BLVD.
(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, February 02, 2011 9:59 AM
To: 'Tony Howell'
Cc: Young, Kevin; thowell@co.linn.or.us; Gibb, Ken; 'jennifer.gervais@oregonstate.edu'; McConnell, Jeff; Franklin, Lisa
Subject: RE: Questions for FEMA hearing

Hi Tony - Thanks for your questions. Tonight's presentation will focus on the issue at hand so we can get to public testimony and keep that testimony focused on this particular FEMA-mandated project. Following public testimony we hope to get all the Commissioner questions out on the table so that we can respond to them during deliberations at the next meeting.

See you tonight - Kelly

From: Tony Howell [mailto:howellt@peak.org]
Sent: Tuesday, February 01, 2011 10:59 PM
To: Potter, Kelly
Cc: Young, Kevin; thowell@co.linn.or.us
Subject: Questions for FEMA hearing

Kelly,

I wanted to let you know about some questions I'll have at the hearing Weds night.

1) Could you do a Floodplain 101 as a part of your staff presentation? The code changes are required by FEMA, which has a focus on flood hazard issues only, whereas our LDC, Comp Plan, Stormwater Master Plan, and Salmon Response Plan look at all the beneficial functions of floodplains (stormwater storage and conveyance, fish habitat during flood events, area for stream migration, etc.). However, most of the Planning Commission may not be up on the full context.
2) Could staff be prepared to bring up map quadrants on the screen if citizens testify about their property, so we can see how that area is affected?
3) Could you bring copies for Commissioners of the Public Works Urban Stream Maintenance Guidelines? The version I got off the Public Works website does not seem fully consistent with the protecting the properly functioning conditions of streams, and go beyond limitations in current LDC (removal of vegetation likely to cause flooding events resulting in structural damage). Since these guidelines can be modified by staff without review for consistency with policy, I'm not comfortable including them unless there is specific language requiring the Guidelines to be consistent with the policy documents.
4) Fences and walls are a problem area, and 5 feet/sec is not a slow flow (erosion occurs at lower velocities). The exemptions for fences/walls in 2.11.40 and parts of Table 4.5-1 are not consistent with prohibitions in 0.2-ft Floodway, Highly Protected Riparian Corridor portions of floodplain, and within 25-ft Partially Protected Riparian Corridor. Within High Protection Floodway Fringe, it conflicts with maintaining floodplain and stormwater functions. Some accommodation should probably be made in Partial Protection Floodway Fringe (outside of PP Riparian Corridor and Floodway), but FEMA's standards don't address out "properly functioning conditions" standard. We need a standard that accommodates fish passage at all flow velocities, limits erosion triggered by fences, and limits damage to neighboring properties when old fences give way under pressure when soil is saturated. Has FEMA mapped flow velocity for our streams?

5) CP 4.8.2.C would seem to allow expanding volumetric exchange for additions to existing structures in infill areas (translated as Partial Protections Floodway Fringe) under the threshold of Substantial Improvement, but not for development over that threshold. The Stormwater Master Plan, Comp Plan, and LDC came out of a careful weighing of the trade-offs—the existing standards give flexibility in infill areas, but they avoided balanced cut and fill in small stream systems because it is hard to accomplish here, especially on small lots (and lot by lot), without creating hydrological havoc. Requiring MADA development to comply with Partial Protection standards is a great idea, since it doesn't prohibit development.
6) Some of the FEMA flood zone definitions in 1.6 are missing the "in any given year" phrase after "one percent chance or greater of flooding." Could you check those?

Thanks for all your work on this.

Tony

Tony Howell
2030 SE DeBord Street
Corvallis, OR 97333
(H) 541-753-9318
(C) 541-760-3828

CITY OF CORVALLIS
PUBLIC WORKS DEPARTMENT

URBAN STREAM MAINTENANCE GUIDELINES

GOAL STATEMENT:

The community's urban streams function as a major component of the storm water system. The streams and riparian corridors also support fish and wildlife, provide green space and increase livability. The goal of urban stream maintenance is to protect and enhance the ecosystem and provide storm drainage.

The five objectives for the maintenance of the urban streams are:

1) Safe Drainage:
   The community's urban streams provide for management and conveyance of storm water. Maintenance activities should maintain appropriate flood flow and storage capacities and protect adjacent properties from undue loss due to erosion and animal damage.

2) Neighborhood Enhancement:
   Urban streams enhance community livability and provide green belts that mitigate the harshness of the urban setting. Maintenance activities should maintain or improve the appearance of the stream.

3) Quality Fish and Wildlife Habitat:
   Urban streams, although they may not be pristine, can provide quality fish and wildlife habitat. Protecting natural resources and retaining fish and wildlife can improve livability and is a community responsibility. Maintenance activities should protect, restore or enhance habitat.

4) Good Water Quality:
   Good water quality is both regulation and livability based. Storm water regulations will soon require municipalities to maintain and/or improve stream water quality. Community livability is enhanced by good water quality. Maintenance activities should maintain or improve water quality.

5) Community Cooperation and Involvement:
   Urban streams are a community asset and can serve as a education tool. Citizens cooperation and participation may reduce maintenance needs. Maintenance activities should promote awareness, education and involvement of the community and adjacent property owners.

GENERAL GUIDELINES FOR STREAM MAINTENANCE

The maintenance of the community's urban streams will be conducted on a section by section basis. The maintenance needs for each section may vary depending on a number of factors. Listed below are the general guidelines that will be used.

1. Foreign debris will be removed from the urban stream, (tires, shopping carts, car parts, metal drums etc.)
2. A 15-25 foot fire break will be cut adjacent to any wooden structure (on City property only).
3. A 15 foot vegetation break will be cut around all bridges.
4. Trees or limbs that could obstruct flow will be removed from the flow channel.
5. Bank erosion will be stabilized through the use of natural materials.
6. Rodent burrow holes will be plugged or filled.

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, February 02, 2011 11:35 AM
To: 'Dave Lytle'
Subject: RE: maps

Hello Dave - Click on the first link below. This link is on the City of Corvallis website. These pdf maps show the "old/current" FEMA 100-year floodplain boundaries versus the new ones. There is an index map and you can then click on a submap for your area and it will allow you to zoom in and see things clearly.
http://www.ci.corvallis.or.us/downloads/cd/PLANNING/FEMA_LDT/PAGES/INDEX.pdf

If you would like to see the actual new FEMA floodplain maps, you can access those on the Benton County website. Click on the following link:
http://www.co.benton.or.us/maps/availdata.php?p=1
&f=GISDataDownload/Zoning_Information/Prelim_FEMA-Maps/

Kelly

-----Original Message-----
From: Dave Lytle [mailto:lytleda@oregonstate.edu]
Sent: Wednesday, February 02, 2011 6:40 AM
To: Potter, Kelly
Subject: maps

Hi Kelly,
I live near the floodplain and would like to view the provisional maps. Where can I find these online?
Thanks,
Dave

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
(FEMA has not yet conducted studies on properties that contain streams, but are not labeled as "High" or "Partial" protection. For those properties, 100-yr. Floodplain studies may be required as part of future development proposals.)

Data on these maps are based on aerial photography and other information sources, which may not be as precisely accurate as you need for floodplain insurance purposes. If floodplain boundaries are very close to structures on this map, check with Engineer Lisa Franklin {(541) 766-6908 or lisa.franklin@ci.corvallis.or.us} to see if she can assist you in more definitively locating the features. Ultimately, a property survey is the most accurate way to locate them.

CORVALLIS PLANNING DIVISION
2300 NW WALNUT BLVD.
(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

505 NW Buchanan - Storhaus

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS

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PLANNING@CI.CORVALLIS.OR.US

Legend

720 NW Linden - Hong

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

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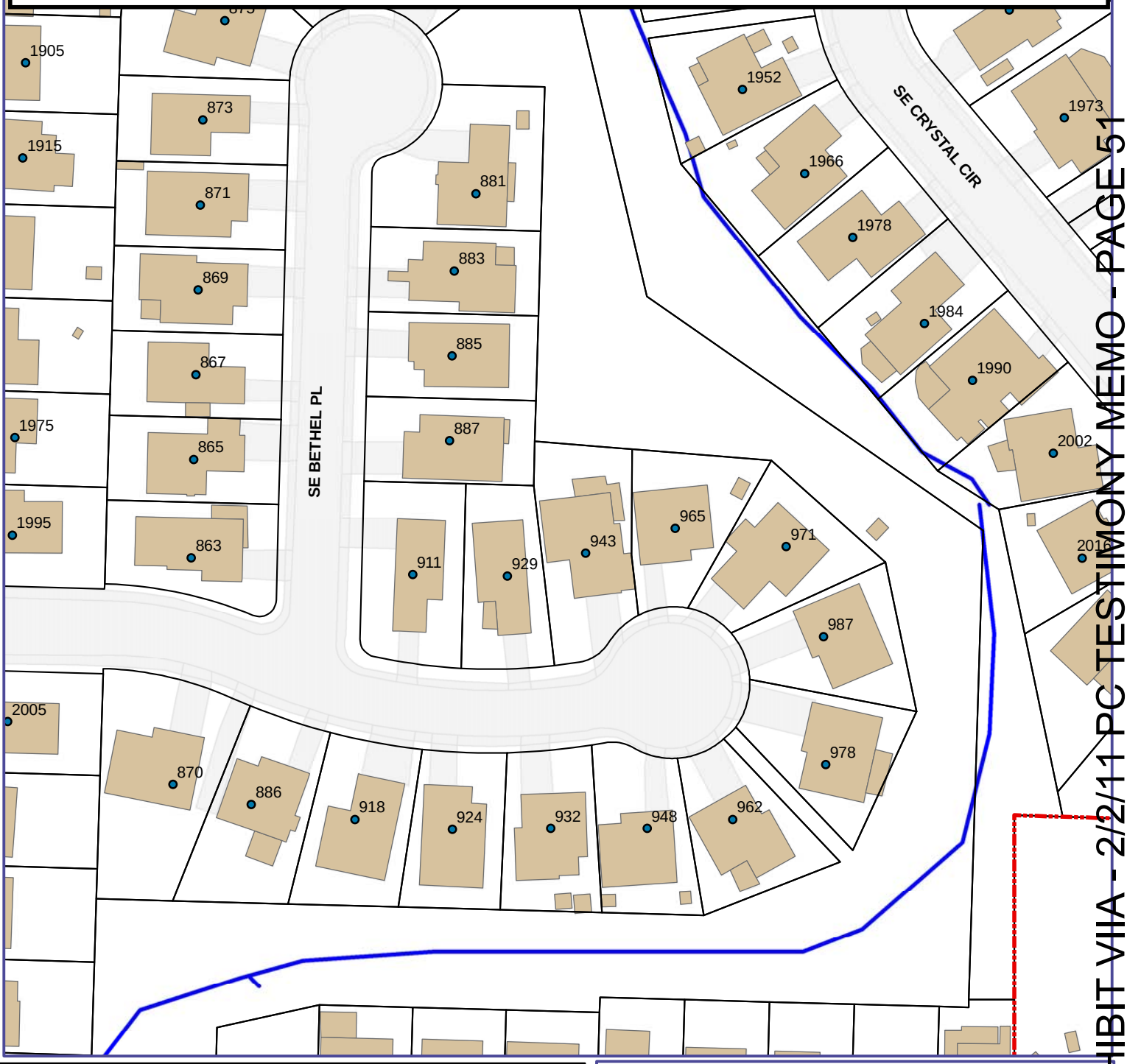

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541.766.6908
PLANNING@CI.CORVALLIS.OR.US

881 SE Bethel Place - Court

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

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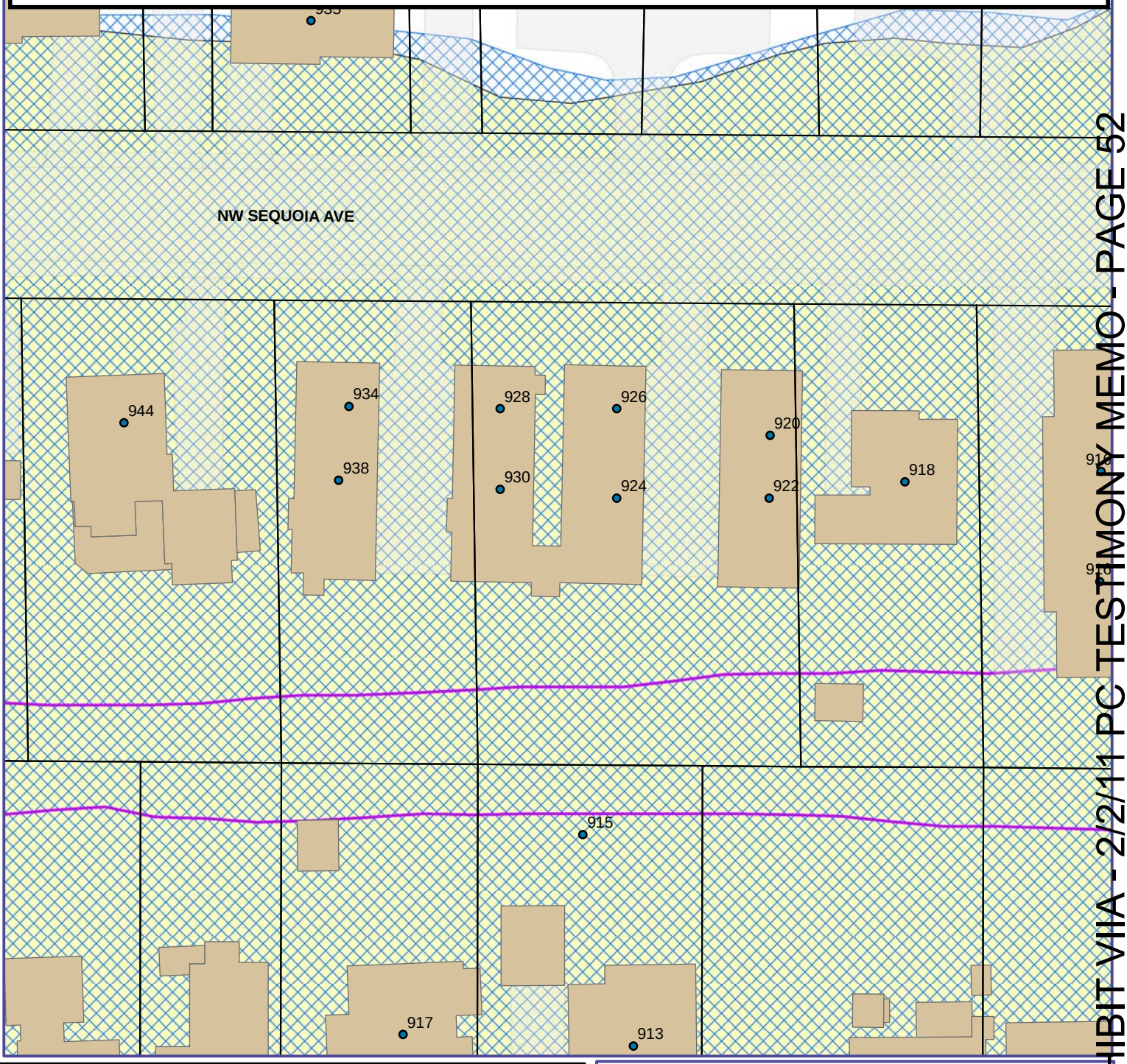

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(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

920-936 NW Sequoia - Hong

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

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Legend

970 NW Sequoia - Hong

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
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- Streams

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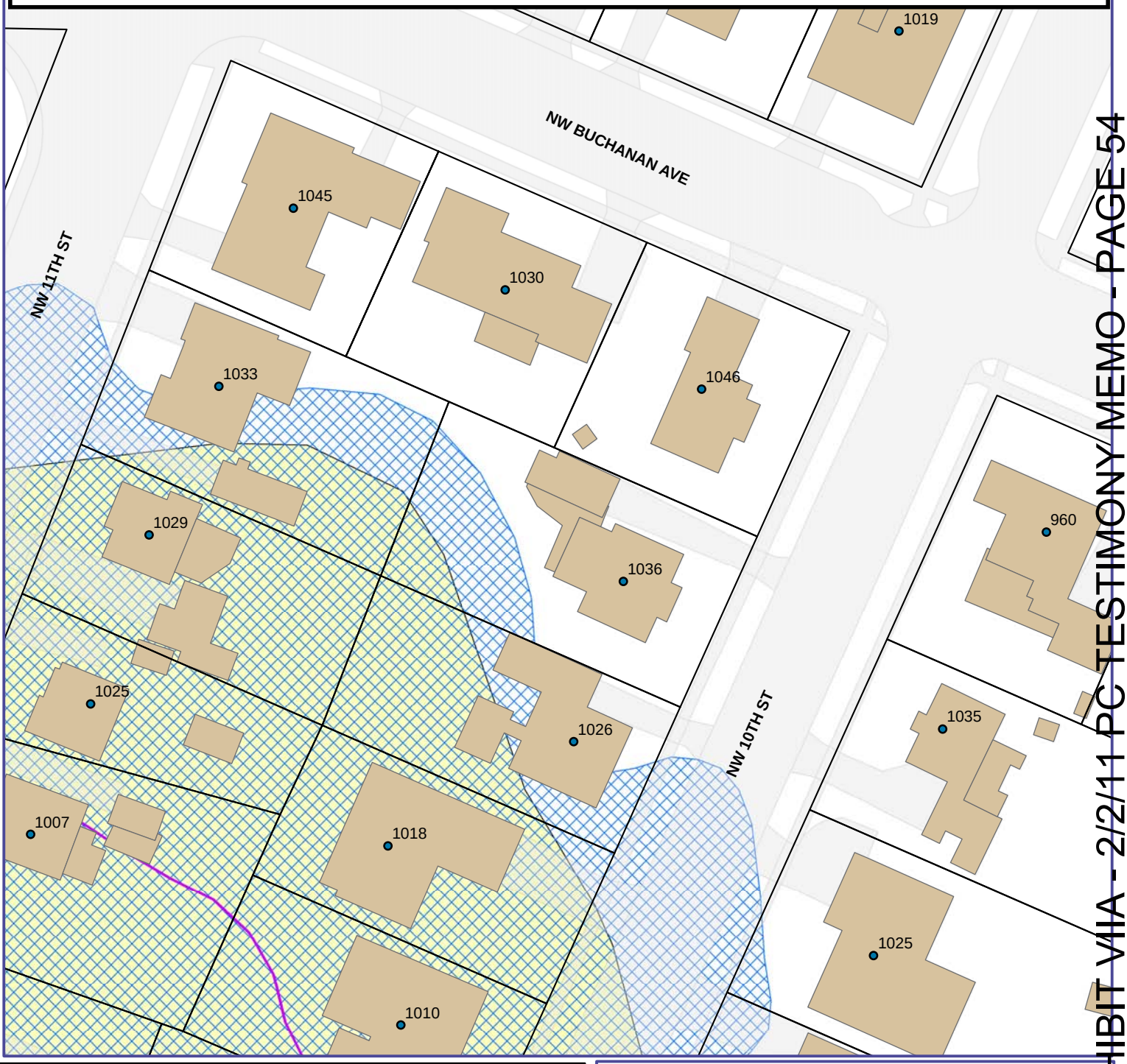

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CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

1036 NW 10th - McDonald

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

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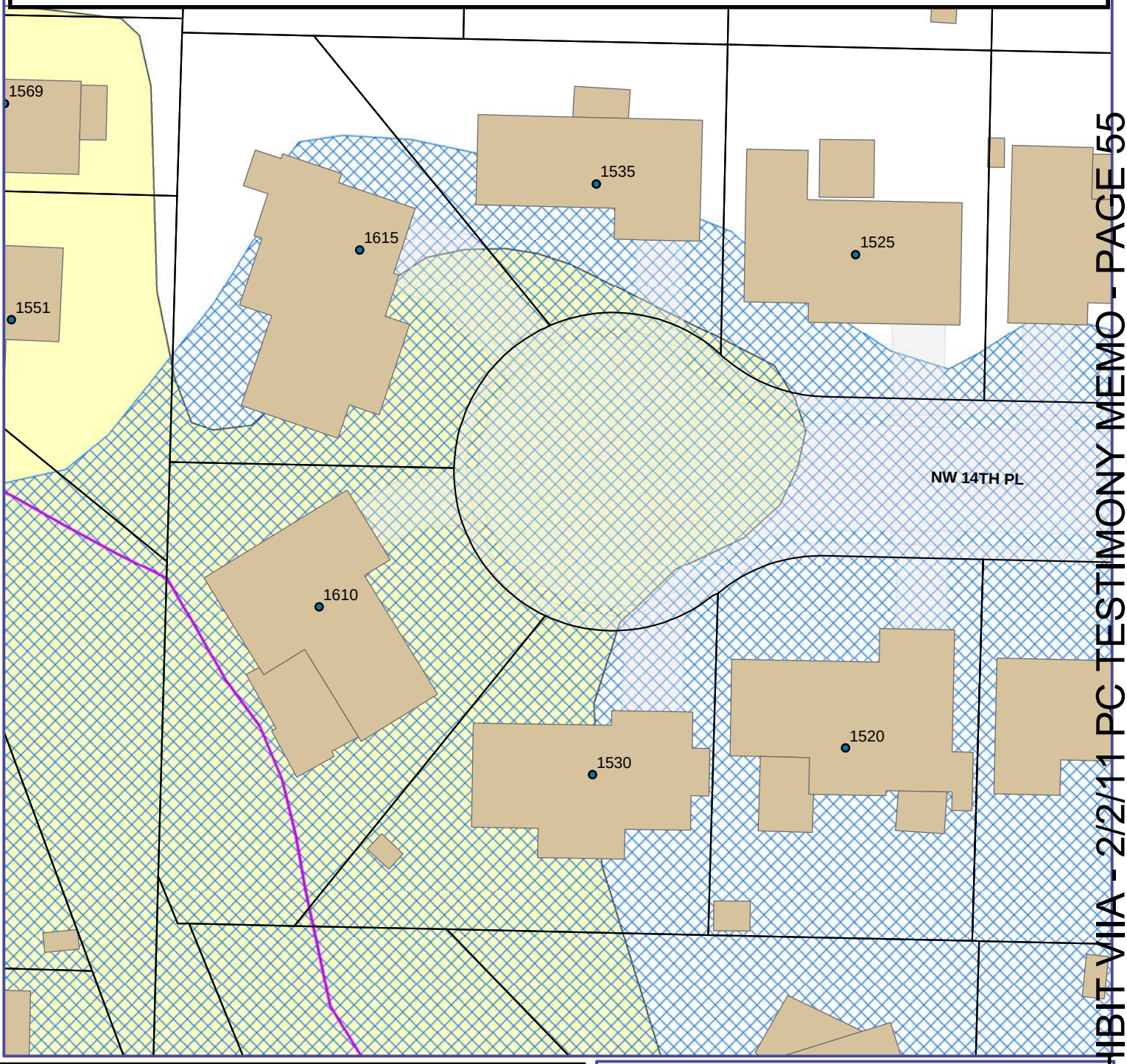

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CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

1525 NW 14th Place - James

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
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- Streams

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(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

1637 SW Reed Place - Newhouse

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

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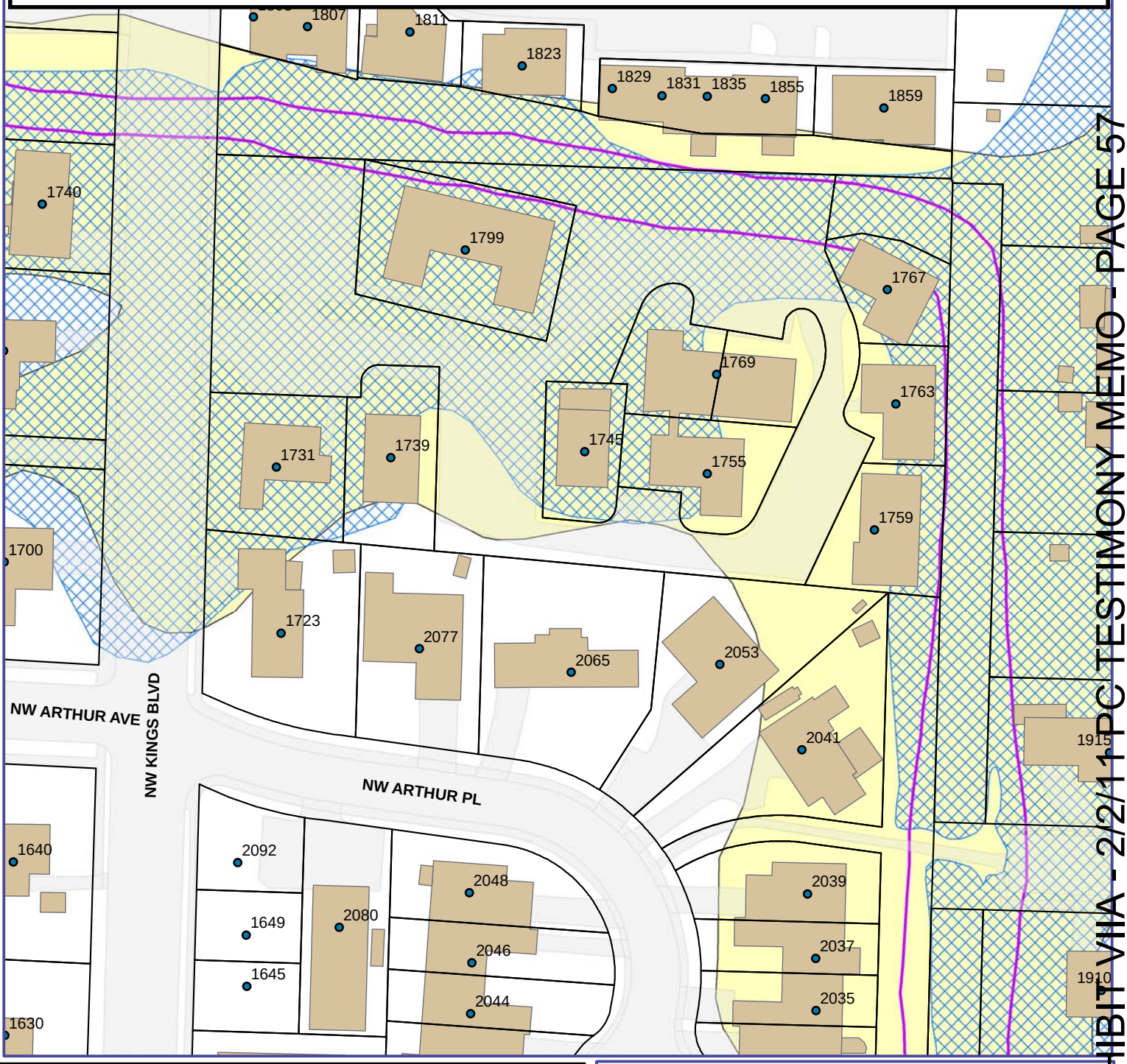

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(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

1759 NW Kings Blvd - Frome

EXHIBIT VIIA - 2/2/11 PC TESTIMONY MEMO - PAGE 57

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS

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(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

2325 NW Elmwood - Steele

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

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2517 NW 9th - Napier

Legend
- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)
PROTECTION
- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)
Protection Level
- HIGH
- PARTIAL
- Streams

CORVALLIS
ENHANCING COMMUNITY LIVABILITY

CORVALLIS PLANNING DIVISION
2300 NW WALNUT BLVD.
(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS

(FEMA has not yet conducted studies on properties that contain streams, but are not labeled as "High" or "Partial" protection. For those properties, 100-yr. Floodplain studies may be required as part of future development proposals.)

Data on these maps are based on aerial photography and other information sources, which may not be as precisely accurate as you need for floodplain insurance purposes. If floodplain boundaries are very close to structures on this map, check with Engineer Lisa Franklin {(541) 766-6908 or lisa.franklin@ci.corvallis.or.us} to see if she can assist you in more definitively locating the features. Ultimately, a property survey is the most accurate way to locate them.

CORVALLIS PLANNING DIVISION
2300 NW WALNUT BLVD.
(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

2800 NW 29th - Saiki

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
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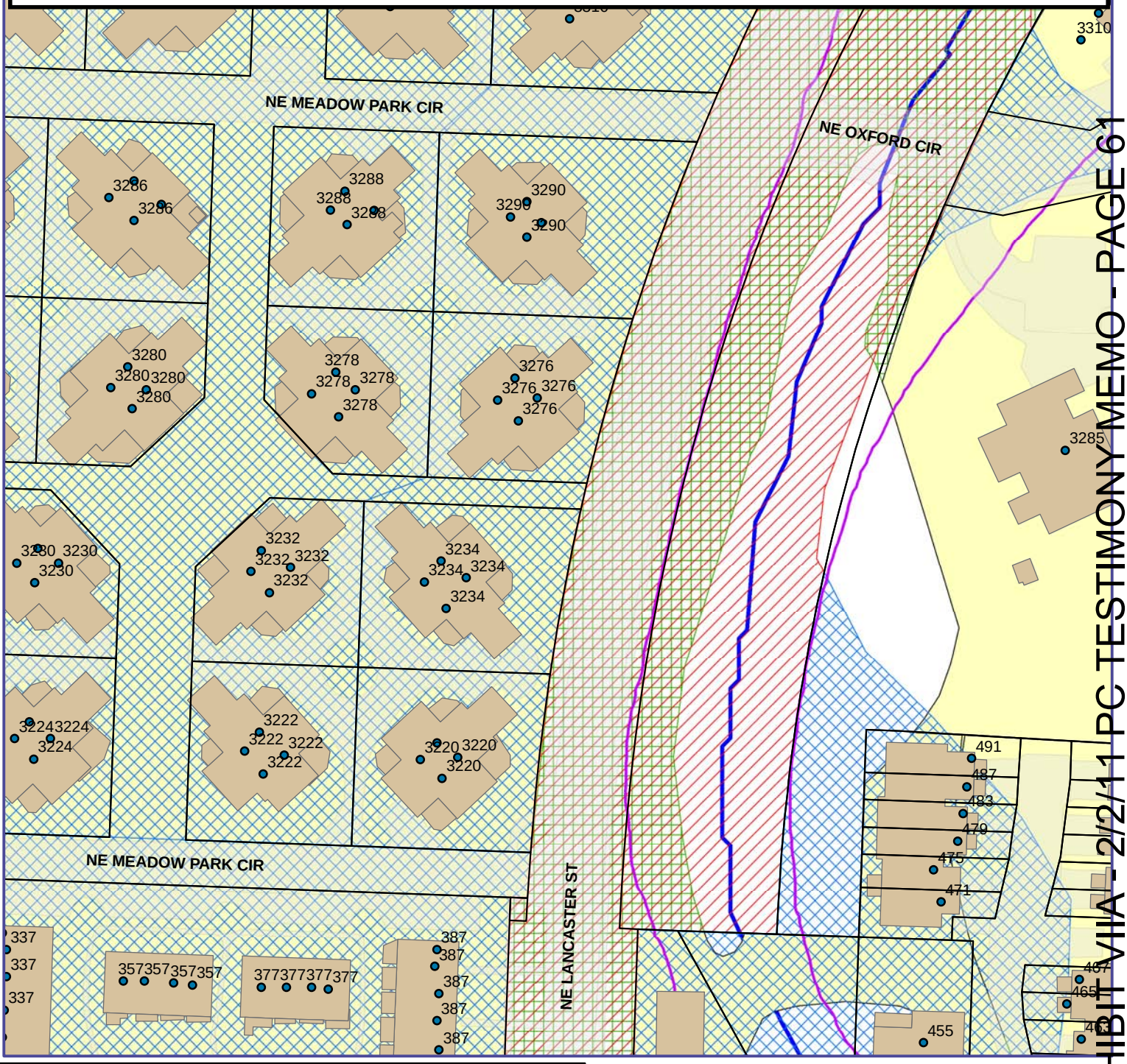

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3276 NE Lancaster - Napier

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

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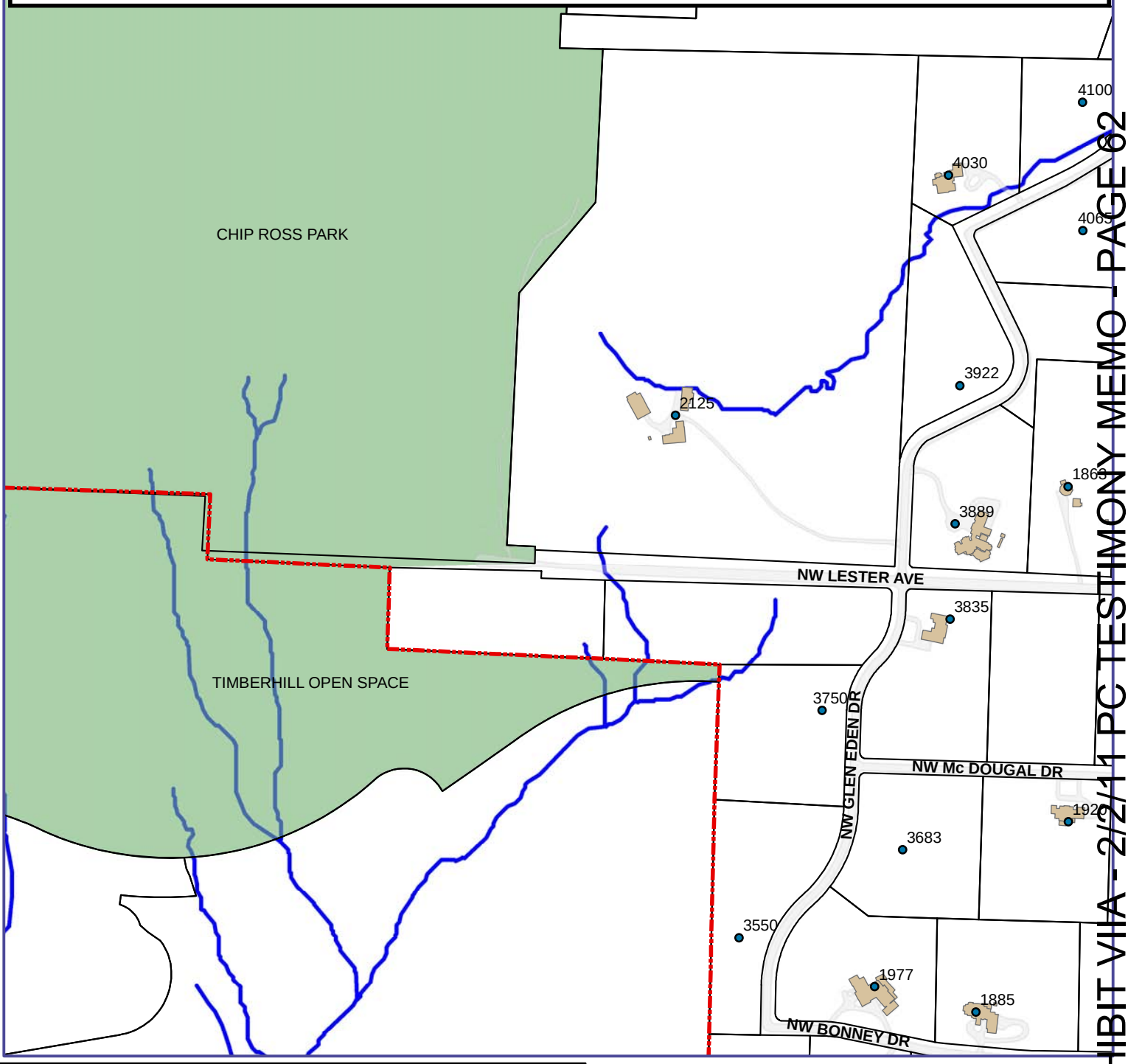

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Lester & Glen Eden - Potter

Legend
- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)
PROTECTION
- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)
Protection Level
- HIGH
- PARTIAL
- Streams

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PLANNING@CI.CORVALLIS.OR.US

MEMORANDUM

From: Kelly Potter, Senior Planner

To: Planning Commission

Date: February 10, 2011

Re: Additional Written Testimony for FEMA Update Project Legislative amendment to the Land Development Code (LDT10-00001)

A previous memo containing public testimony was distributed to the Planning Commission on February 2, 2011. This memo contains public testimony received and/or sent between 12:00 noon on February 2, 2011, and 5:00 pm on February 9, 2011. The written record for LDT10-00001 closed at 5:00 pm on February 9, 2010. Any testimony received after that time will be forwarded to the Planning Commission under separate cover.

Many of the attached pieces of testimony are personalized maps that staff created at the request of property owners. Some property owners requested that hard copies be sent to them in the mail. Those particular maps are contained at the end of the testimony attached to this memo. Other property owners requested that pdfs of these maps be sent to them via email.

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Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, February 02, 2011 4:13 PM
To: 'Dave Lytle'
Cc: LEWIS Toby A
Subject: RE: maps

Hello Dave - The blue and black lines on those digital FEMA panels are depicted in the legend on that panel. The legend is in the upper right hand portion of the panel. I looked up your site at 1562 Alexander Ave, and you are currently outside the City limits. This means that until you are annexed someday, you won't be subject to the Land Development Code changes that the City is processing right now. However, you will be subject to the recent Land Development Code change that Benton County processed (these also address the federally mandated floodplain requirements). Toby Lewis is the planner at Benton County who is the contact for that information. I am cc'g her to this email so that you have her email if you have questions on those Code provisions.

Please let me know if I can be of further help - Kelly

-----Original Message-----
From: Dave Lytle [mailto:lytleda@oregonstate.edu]
Sent: Wednesday, February 02, 2011 1:28 PM
To: Potter, Kelly
Subject: Re: maps

Thanks Kelly. The new map appears correct to my eye (I'm at the end of Alexander Ave, 1562). What do the blue and black lines signify -- they both mark the floodplain edge, but are not exactly the same?

-Dave

****
David A. Lytle
Oregon State University
(541) 737-1068
http://www.science.oregonstate.edu/lytlelab/

On 2/2/2011 11:35 AM, Potter, Kelly wrote:
> Hello Dave - Click on the first link below. This link is on the City
> of Corvallis website. These pdf maps show the "old/current" FEMA
> 100-year floodplain boundaries versus the new ones. There is an index
> map and you can then click on a submap for your area and it will allow
> you to zoom in and see things clearly.
> http://www.ci.corvallis.or.us/downloads/cd/PLANNING/FEMA_LDT/PAGES/IND
> EX
> .pdf

>
>
> If you would like to see the actual new FEMA floodplain maps, you can
> access those on the Benton County website. Click on the following link:
> http://www.co.benton.or.us/maps/availdata.php?p=1&f=GISDataDownload/Zo
> ni
> ng_Information/Prelim_FEMA-Maps/
>
> Kelly
>
> -----Original Message-----
> From: Dave Lytle [mailto:lytleda@oregonstate.edu]
> Sent: Wednesday, February 02, 2011 6:40 AM
> To: Potter, Kelly
> Subject: maps
>
> Hi Kelly,
> I live near the floodplain and would like to view the provisional maps.
> Where can I find these online?
> Thanks,
> Dave

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
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PLANNING@CI.CORVALLIS.OR.US

Legend

1800 NW Garfield - Schuetz

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 5

Potter, Kelly

From: Dawn Chere Moss [dmoss@kaizenusa.com]
Sent: Thursday, February 03, 2011 2:48 PM
To: Potter, Kelly
Subject: RE: PDFs of 3 Burger King sites and floodplain information

Thank you Kelly for taking the time to do the extra work to send that info to me, it is greatly appreciated.

Dawn Chere Moss
Facilities Coordinator
Kaizen Restaurants Inc., Sara Foods Inc.,
Mt. Hood Restaurants, Inc., Priceless Restaurants, Inc.,
Zoya Foods, Inc., Timeless Foods Inc.
503-906-1290 x 216
503-906-1297 fax

From: Potter, Kelly [mailto:Kelly.Potter@ci.corvallis.or.us]
Sent: Thursday, February 03, 2011 1:32 PM
To: dmoss@kaizenusa.com
Subject: PDFs of 3 Burger King sites and floodplain information

Hello Dawn - Here are the 3 pdfs as promised. Please let me know if you have any questions.

Kelly

<<235 NW 4th St - Moss.pdf>> <<2408 NW 9th St - Moss.pdf>> <<5000 SW Philomath Blvd - Moss.pdf>>

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339
(541) 766-6908
kelly.potter@ci.corvallis.or.us

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 6

Potter, Kelly

From: Potter, Kelly
Sent: Thursday, February 03, 2011 1:32 PM
To: 'dmoss@kaizenusa.com'
Subject: PDFs of 3 Burger King sites and floodplain information

Attachments: 235 NW 4th St - Moss.pdf; 2408 NW 9th St - Moss.pdf; 5000 SW Philomath Blvd - Moss.pdf

Hello Dawn - Here are the 3 pdfs as promised. Please let me know if you have any questions.

Kelly

235 NW 4th Moss.pdf (1 M
2408 NW 9th Moss.pdf (6 k
5000 SW nath Blvd - Mo

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339
(541) 766-6908
kelly.potter@ci.corvallis.or.us

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 7

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(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

Legend

235 NW 4th St - Moss

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

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EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 8

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2408 NW 9th Street - Moss

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO PAGE 9

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Legend

5000 SW Philomath Blvd. - Moss

- address
- City Limits
- Two Tenths Flooday Protections

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PROTECTION

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- Streams

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 10

Potter, Kelly

From: Potter, Kelly
Sent: Monday, February 07, 2011 8:53 AM
To: 'Roger Lizut'
Subject: RE: FEMA follow-up

Thanks for the clarification Roger -

In the development of the proposed Land Development Code modifications, we most definitely tried to do exactly what you are suggesting - marry the FEMA regulations with the technology. Nonetheless, we will definitely be considering the public testimony very carefully to see how we may be able to further modify the proposed modifications to address some of the concerns. It becomes quite challenging to balance practicality and day-to-day operations impacts with optimal technical floodplain improvements, but we are striving to achieve the best balance we can.

Kelly

From: Roger Lizut [mailto:wwrwl45@gmail.com]
Sent: Thursday, February 03, 2011 7:20 PM
To: Potter, Kelly
Subject: Re: FEMA follow-up

Kelly

I'm afraid I was remiss in being precise in my first message. I want to differentiate technical content from bureaucratic processes. Regarding the latter, you did an outstanding job of reassuring all that every reasonable effort will be made to minimize difficulty.

What I wanted to express originally is that wherever possible within the regulatory constraints, we should inject operational language into the code that facilitates physical improvements in flood plain areas. I'm hoping that the lady who requested the extension provides specific technical recommendations, or least references to such, that will allows us to take advantage of this opportunity for code revision.

Naturally, it is not that staff has nothing better to do than perfect the marriage of regulations and technology, but any progress that can be made to encode technical improvements from a systems view would be beneficial.

If this request is redundant to what you already plan to do, please accept my thanks for your foresight.

On Thu, Feb 3, 2011 at 12:24, Potter, Kelly <Kelly.Potter@ci.corvallis.or.us> wrote:

> Thanks for your comments Roger -
>
> You are right that, to the extent we can try and steamline our already highly regulated process, it would be good to do so to try and help affected property owners. We are looking for win-win solutions that will accomplish the FEMA requirements in a manner that can still

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 11

be accomplished from a practical standpoint on a day-to-day operations basis.

Kelly

From: Roger Lizut [mailto:wwrwl45@gmail.com]
Sent: Wednesday, February 02, 2011 8:58 PM
To: Potter, Kelly
Subject: FEMA follow-up

Kelly

I'll be out of town the 16th and wanted to share some thoughts. I'll use a little vignette from my former life as introductory material.

In 1988 while at Sandia National Labs, I served as the coordinating editor of the System Requirements document for the proposed Yucca Mountain Project in Nevada that would serve as the national repository for nuclear waste. There were contributors from about 8 different agencies and I conducted iterative review and comment cycles to create the document. It took me 3 iterations to convince the community that we should drop the Shoreline Protection Act from the list of requirements.

By analogy, it would be nice if we could find some way of meeting the intent and letter of the law from FEMA and still leave some wiggle room to insert language that addresses specific issues/needs of our locality. Unfortunately, I don't have any such specifics to offer, but hopefully, the comments you receive during the extension period might be helpful in that way.

If you have any questions regarding this message, feel free to contact me.

Thanks

--
Roger Lizut
wwrwl45@gmail.com
360-618-3217

--
Roger Lizut
wwrwl45@gmail.com
360-618-3217

EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 12

Potter, Kelly

From: Potter, Kelly
Sent: Monday, February 07, 2011 10:26 AM
To: 'sharon.garber@gmail.com'
Cc: Franklin, Lisa
Subject: FW: Floodplain Map
Attachments: 916 NW Chipmunk Pl - Garber.pdf

Hello Sharon - here is a copy of the floodplain area near your property at 916 NW Chipmunk Place. As you can see, it does not cross onto your property. Should you have any questions, please do not hesitate to contact me.

Kelly

Kelly Potter, Senior Planner
City of Corvallis
(541) 766-6908
kelly.potter@ci.corvallis.or.us

From: Franklin, Lisa
Sent: Monday, February 07, 2011 8:21 AM
To: Potter, Kelly
Subject: FW: Floodplain Map

Would you like to handle these still?

Lisa M. Franklin

From: Sharon Garber [mailto:sharon.garber@gmail.com]
Sent: Friday, February 04, 2011 3:07 PM
To: Franklin, Lisa
Subject: Floodplain Map

We attended Tuesday night's meeting and we would like to request a map for our property:

Thanks.

William & Sharon Garber
916 NW Chipmunk Place

Map: 11523DB
Tax Lot: 7600

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS

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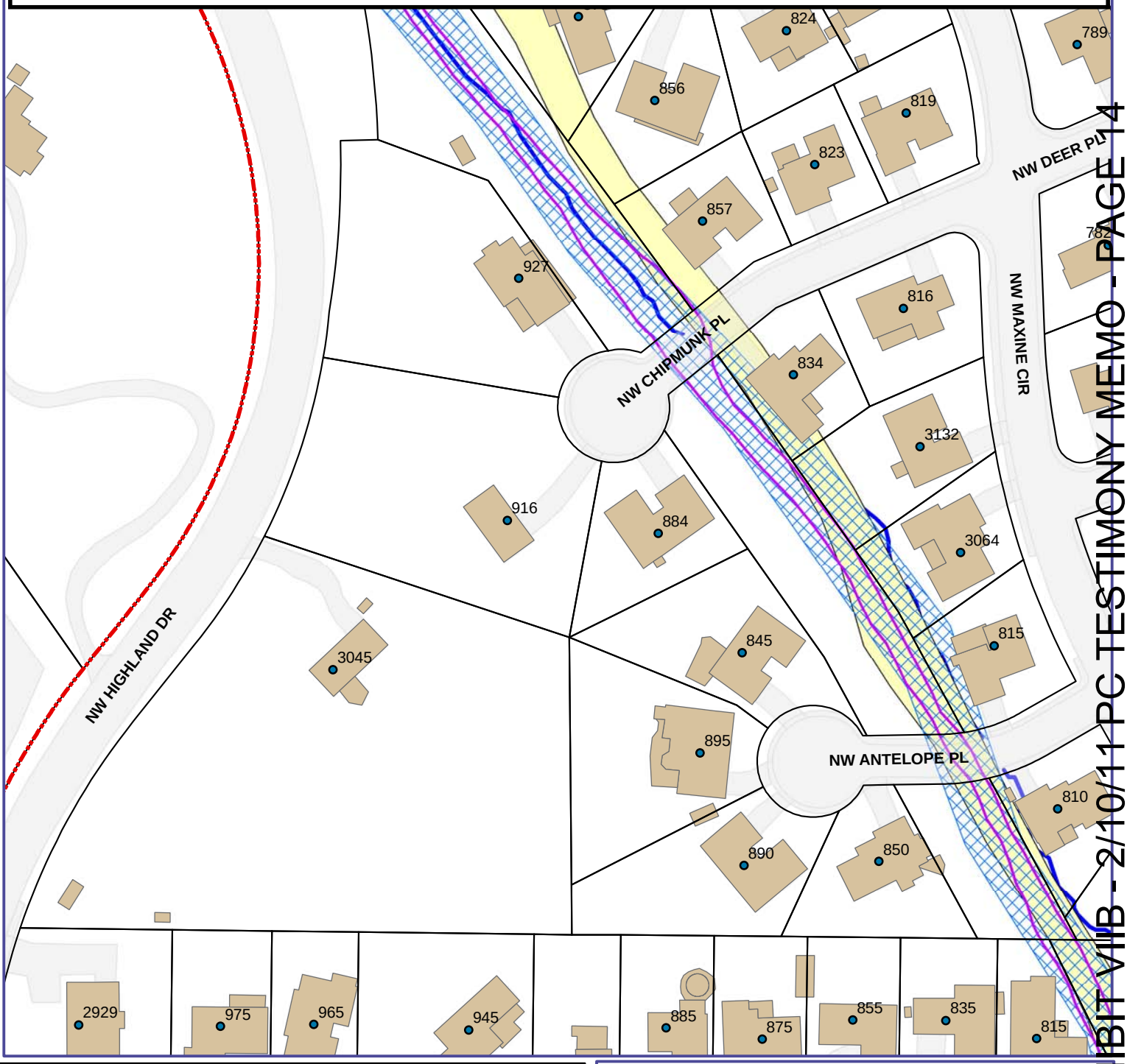

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PLANNING@CI.CORVALLIS.OR.US

Legend

916 NW Chipmunk Place - Garber

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

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EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 14

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Legend

971 NW Sycamore Ave. - Husen

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

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EXHIBIT VIIB - 2/10/11 PC TESTIMONY MEMO - PAGE 15

RECEIVED

FEB - 9 2011

Community Development
Planning Division

MEMORANDUM

TO: Corvallis Planning Commission
FROM: Patricia Benner
SUBJECT: Land Development Code – proposed FEMA language
DATE: February 8, 2011

I am a Stream Ecologist, and was the chair of the Stormwater Planning Committee for the *Stormwater Master Plan* (2002).

The Stormwater Master Plan (2002)

A large part of the Stormwater Planning Committee's (SWPC) work, in addition to an extensive public outreach, involved the writing of Stormwater policies. The topics of these policies included cross-jurisdictional boundaries, public information outreach, water quality, water quantity, wetlands, uplands, stream system management and floodplain management. The majority of these policies were incorporated into the *Corvallis Comprehensive Plan*. Groundwater and its components were also often discussed throughout the SWPC's work, even though there was not a specific policy section for this stormwater component.

I would like to focus on the Stormwater Planning Committee's floodplain discussion, and the basis for the floodplain policies. Having said that, though, I would like to clarify that *all* of stormwater elements are interwoven, and as such all are at some point inter-connected with a floodplain discussion.

For land use policy purposes, we decided to divide floodplains into two categories. The first category included all small (local) streams in the Corvallis area (the tributaries to the Willamette and Marys Rivers). The Willamette River, and the Marys River and millrace were placed in a second category.

The two categories of waterways were created because it was recognized that it was much easier to upset the "hydrological applecart" and have much larger hydrological impacts with modifications to the floodplain of the local streams. Examples of this would be:

1. Any typical fill or other modification of the topography, or other development impacts from a single development would have a much larger hydrological consequence to a small stream, since that development would proportionately a much larger area of the floodplain than the same development in the Willamette

or Marys River floodplain; plus,

2. development would be likely to be adjacent to, or abutting the stream channel where flow velocities would be greater.

3. It is virtually impossible to do "balanced cut and fill" in a local floodplain without, among other problems, create scour zones, and create areas of ponding with potentially sanitary sewer-contaminated water. Often time soil scouring does not happen until floodwater begins receeding, too.

So, the strategy that was created was:

– for small (local) streams there was to be no development in the entire floodplain (floodway fringe as well as flodway);

– for the Willamette River, and the Marys, River and Millrace there could be development in the floodplain, but it had to be designed in a way that it did not compromise stormwater functions, including no negative hydrological impacts. Balanced cut and fill (volumetric exchange) was allowed if it met this criterion.

The largest challenge with excluding development in the floodplain of local streams was that, though that policy worked well in greenfield (undeveloped) floodplain areas, a good part of the floodplain in the developed parts of town had already been built on, or were infill lots.

It was the SWPC hope that, just like with redevelopment in other parts of town, over time urban development in the floodplain could be modified to improve on the current situation. This could range from elevating replacement or new (infill) structures on pilings rather than on fill, to purchasing certain floodplain properties and returning them to be a part of an open space corridor system along the streams.

Policy 4.8.2 in the Floodplain Section 4.8 of the *Corvallis Comprehensive Plan* implemented these thoughts and objectives that are listed above.

The overarching concept behind the SWPC's thoughts were that:

stream channels, proximate wetlands and floodplain are the *core of the stormwater utility*.

The Stormwater Planning Committee members also saw the many and various costs to City government and the conflicts with the streams because of

development in the floodplain. These costs included:

1. Anger of the citizens when a stream flooded, with the blame pointed at City government; citizens often don't seem to forget their disgruntlement with government;
2. Ongoing costs to the City to manage the channel and water corridor when development is in the floodplain or close to the stream bank;
3. Citizens do not realize that even though a property is *mapped* to be in the 100-year floodplain, their property is actually statistically flooded much more often (the mapping includes annually flood land as well as the edges of the floodplain that have a one percent of flooding annually.

4. MOST IMPORTANTLY, there are generally no visual clues in neighborhoods that the house being bought by a citizen is in a floodplain.

For all of these reasons, I feel that any house that is built in the floodplain should be built on "flow-under" pilings or similar structures so the message that the house is in the floodplain is right there and permanent.

I saw that people were purchasing homes in the floodplain, not understanding the ramifications . One example, a concerned citizen commented that while their house was not flooded because it was on fill, the streets were flooded they could not drive their wife, who had heart trouble to the hospital – they were marooned by the floodwaters.

FEMA.

The reality regarding FEMA and the National Flood Insurance Program is that FEMA is attempting to reduce flood structural damage risk and provide flood insurance. To my knowledge, FEMA has not incorporated the multiple floodplain functions that Corvallis recognizes for the Salmon Response Plan, EPA/DEQ stormwater regulations and local stormwater policies.

Floodplain Functions

1. Example of Biological Functions: The floodplain is a refuge area for fish during a flood. It is also an opportunity for a wealth of food for fish – drowniung worms, insects, etc.

2. Example of Chemical Functions: Pollutants tend to adhere to particulates in the water. These particulates drop out onto the floodplain once the water velocity

slows, and these can often be processed by micro-organisms or sterilized by exposure to light.

3. Example of Physical Functions:
   a. Floodplains store the extra flood water – floodplains can be thought of as a part of the "channel" or waterway, even if they are under water only a part of the time.
   b. Floodplains dissipate kinetic energy in the flood-velocity flowing water.

So, one must think about floodplains more broadly than the limited parameters of FEMA's goals. This is not to say that the FEMA maps and other work are not valuable; the data and maps are great tools in many arenas, but FEMA regulations do not capture all the our local floodplain objectives.

My Concerns regarding FEMA Land Development Standards

1. Walls and fences in local stream floodplains:.

   – I suggest that walls and fences are not appropriate for the significant floodplain/highly protected floodplain areas.

   – I do not think that walls should be allowed in any local stream floodplain, because the problems that they would create would range from causing scour at the wall or downstream. A wall might also isolate a portion of the floodplain from flooding.

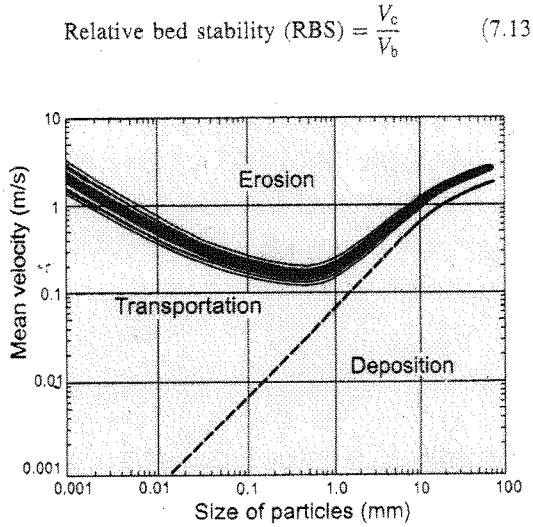

Figure 7.18. Hjulstrom curves showing the limiting velocities required for erosion, transportation and deposition of uniform material. Adapted from Hjulstrom (1939), AAPG ©1939, reprinted by permission of the AAPG whose permission is required for further use

Graph from: Gordon et. al, 2004. Stream Hydrology, An Introduction for Ecologists.

For small and large particles, the velocity required for erosion is about **4 ft/second**.

For medium-sized particle, the velocity required for erosion is about **0.4 ft/second**

2. The 5 feet/second floodwater velocity standard:

Though I understand the need to limit when property owners just obtain a permit (and I agree), the 5 feet/second threshold for development concerns me. I want to point out that a 5 ft./second velocity is a fairly fast current that should be used with caution. I suspect that I am also concerned that this velocity might also be used for other evaluation needs, and point out that it is a velocity that is so fast that many people might find it difficult in which to stand up.

Thank you to FEMA and staff for all of the work associated with updating the flood maps. I believe that hey will be a welcome asset to the community. And, thank you to the Planning Commission for reviewing this testimony.

Sincerely,

Patricia Benner

2030 SE DeBord St.
Corvallis, OR 97333
bennerp@peak.org
541-753-9318

sent to:
Kelly.potter@ci.corvallis.or.us
cc. Sharon.crowell@ ci.corvallis.or.us

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, February 16, 2011 11:46 AM
To: 'Gervais, Jennifer - FW'
Cc: McConnell, Jeff; Franklin, Lisa; Young, Kevin
Subject: FW: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

Hi Jennifer - One more clarification. On Question 3, the corrected reference should be Section 4.5.110.12.b, since we are directing folks to the fence/wall design standards.

Thanks - Kelly

-----Original Message-----
From: Potter, Kelly
Sent: Wednesday, February 16, 2011 10:02 AM
To: 'Gervais, Jennifer - FW'
Cc: McConnell, Jeff; Franklin, Lisa; Young, Kevin
Subject: RE: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

Hi Jennifer -

Answer for Question 1: This came from FEMA Region X and the State Department of Land Conservation and Development.

Answer for Question 2: There is no direct relationship of water velocity to the opening of these flaps. The flaps open via water pressure. This can occur with standing water, if the water is deep enough and the gravity creates the pressure.

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Answer to Question 4: The Flood Insurance Study has the floodwater velocities at certain points within the floodplain areas studied by FEMA. Staff interpolates the floodwater velocities at precise points, using that data. This is done exactly like the interpolations for Base Flood Elevation. The Flood Insurance Study has cross-sections that identify the Base Flood Elevation and for the properties in between these cross-sections, staff interpolates the BFE for people. Where FEMA has not studied, a property owner would have the option of conducting a floodwater velocity study to provide the information, but the much easier route would be for the property owner to simply apply for a Floodplain Development Permit for a fence and comply with the standards in Section 4.5.110.12.

See you tonight! Kelly

-----Original Message-----

EXHIBIT VIIC - 2/16/11 TESTIMONY - PAGE 1

From: Gervais, Jennifer - FW [mailto:Jennifer.Gervais@oregonstate.edu]
Sent: Wednesday, February 16, 2011 7:46 AM
To: Potter, Kelly
Subject: RE: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

Hi Kelly,

I have some questions for tonight.

First, where did the 5 ft/sec standard come from for the exemptions to permits>

How fast does water have to move to create a pressure of 20 pounds per square foot? (the flap fence in table)

Note that 4.5.110.12.a. 2 references 2.11.40. b.2- but there is no b.2. What gives?

How exactly would the floodplain administrator determined the current speed if FEMA doesn't give it? Presumably the idea is to figure out conditions during that 100 year flood event?

Thanks!

See you tonight,

Jen

_____

From: Potter, Kelly [Kelly.Potter@ci.corvallis.or.us]
Sent: Tuesday, February 15, 2011 2:02 PM
To: hannarm@comcast.net; Gervais, Jennifer - FW; jamesfeldmann@yahoo.com; Jasmin; jim.ridlington@comcast.net; WWRWL45@gmail.com; Reese, Steve; tbabernathy@fedins.com; howellt@peak.org; thowell@co.linn.or.us
Cc: Extrom, Joan; Crowell, Sharon; Young, Kevin; Mark Lindgren; McConnell, Jeff; Franklin, Lisa
Subject: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

Hello All - Attached is the memo I promised. It contains a Staff response to the issues raised for the FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001). The deliberations for this project are tomorrow night, Feb 16. We'll see you then!

Kelly

<<02-15-11 PC Memo Re Issues Raised.pdf>>

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339

(541) 766-6908
kelly.potter@ci.corvallis.or.us

Additional Written Testimony for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

This exhibit contains public testimony received and/or sent between the close of the written record for the Planning Commission public hearing process and the completion of this City Council Staff Report.

Some of the attached pieces of testimony are personalized maps that staff created at the request of property owners. Some property owners requested that hard copies be sent to them in the mail. Other property owners requested that pdfs of these maps be sent to them via email. Some of the attached pieces of testimony are Planning Commissioner emails with questions posed to staff.

Potter, Kelly

From: Howell, Tony [thowell@co.linn.or.us]
Sent: Friday, February 11, 2011 8:49 AM
To: Potter, Kelly
Cc: Young, Kevin; Extrom, Joan
Subject: FEMA comments & questions
Attachments: FEMA LDC changes, memo to staff 2-9-11.doc

Kelly,

Sorry about the delay ... my e-mail at home has been broken. I decided today to give up and e-mail this from work. Please call me if you have any questions. Thanks.

Tony Howell
541-760-3828

EXHIBIT VIID - ADDITIONAL TESTIMONY - PAGE 2

Memorandum

To: Kelly Potter, Corvallis Planning Division

From: Tony Howell, Planning Commission

Date: February 9, 2011

Subject: FEMA LDC Amendment questions for deliberations

Thanks for all your work on this project!

The following are my questions (italicized) and concerns for staff consideration on the draft LDC language, pending any additional written testimony we will receive. They are all in three topic areas, and the page numbers refer to the page in the Staff Report or Attachment.

Public Works Urban Stream Maintenance Guidelines

Thank you for providing the current Urban Stream Maintenance Guidelines at the hearing.

The proposed amendment would add "Maintenance consistent with the City of Corvallis Public Works Department Urban Stream Maintenance Guidelines" to the list of exemptions for the removal of vegetation, etc., in floodways (4.5.80.03.a.8 and 4.5.80.03.b.7, p. A-354) and in the High Protections Floodway Fringe (4.5.90.g, p. A-356). My concern is that these Guidelines (primarily #4 and 5) are less restrictive than current LDC standards, and potentially inconsistent with City policies. For example, the current 4.5.90.d (new numbering, p. A-356) allows "removal of emergent in-channel vegetation likely to cause flooding events that result in structural damage." The "Guidelines" state that any vegetation that "<u>could</u> obstruct flow <u>will</u> be removed [*emphasis added*]." This is the old 1990s approach to stream maintenance (when these Guidelines were written), and new language was purposely chosen in the Stormwater Master Plan and Comp Plan to revise these Guidelines. Examples of relevant SWMP policies:

- **QN-13:** The City shall use maintenance policies that enhance the natural detention capacity and upstream storage capacity of urban streams, such as retaining vegetation and wood, and allowing beaver dams to remain instream.
- **UP-1:** The City shall ensure that operation and maintenance practices protect, enhance, and restore upland natural areas and their functions and processes.
- **SS-15:** The City shall work to develop maintenance practices that enhance and protect stream conditions.

Comp Plan policies, including 4.10.3 and 4.10.5, were also intended to limit vegetation removal in streams to extreme circumstances. Vegetation and downed wood in streams is important for fish habitat, pool formation, water quality, shading, reduction of velocities and erosion, and are part of the "properly functioning conditions" required by our policies.

I am also uncomfortable with incorporating an exemption for activities listed in a referenced document that can change without an evaluation of its consistency with land use policies.

Are there specific maintenance activities consistent with SWMP and Comp Plan policies that Public Works is prevented from doing by current LDC language? If so, I'd prefer we consider adding those specific activities to the list of exemptions, rather than incorporate a reference to a document.

Fences and Walls

As noted in testimony, fences and walls create problems during flood events, causing erosion (often on the upstream neighbor's property), changing flow patterns, and frequently being torn out and taken downstream to damage others' property. For that reason, we need to be careful about what we are changing here.

The draft amendment gives the impression of allowing any wall or fence in areas where the flow velocity is <5ft./sec. (2.11.40b Exemptions, p. A-193), or allowed with a specific flow-through design in areas where velocity is >5ft./sec., consistent with Table 4.5-1 (Attachment A-371). However, other existing standards in the LDC prohibit all walls and fences:

- In the 0.2-ft. floodway (unless part of City infrastructure, etc), per 4.5.80.01 (p. A-352)
- In the Highly Protected Riparian Corridor, per 4.13.50.b (p. A-414)
- In the 25-ft Partially Protected Riparian Corridor, per 4.13.60.b (p. A-420)
- In the High Protection Floodway Fringe, except for existing structures, per 4.5.90.02.

If my reading of this is correct, and the new Fences and Walls standards were only intended to apply to other areas (mainly Partial Protection Floodway Fringe outside the 25-ft riparian corridor), should we add language to 2.11.40.b (Exemptions), 4.5.110.12 (Fences and Walls), and Table 4.5-1 to clearly communicate that?

Even in the Partial Protection Floodway Fringe, I am concerned about allowing unlimited fences and walls where the flow is <5ft./sec, given the risk at that velocity to erode property, block fish passage, and wash fences downstream. On the other hand, requiring permits (and the flow-through designs in Table 4.5-1) at a lesser velocity will increase the number of property owners needing a permit. I would propose that we:

- Set a standard for permeability for fences for those properties qualifying for the 2.11.40.b exemption, such as a maximum of 2/3 coverage in any 2-foot stretch of fencing (which would allow the use of 4-in wood fencing with 2-in gaps), or implement the standards in Table 4.5-1 (without having to apply for a permit).

Could staff develop some potential language for this? Are there other options for accomplishing the same objectives?

Volumetric Exchange

The amended language that expands the use of volumetric exchange to all Partial Protection Floodway Fringe areas is in conflict with Comp Plan policy 4.8.2.c & d (and SWMP policies FP-4 & 5), which are the basis for our current standards allowing volumetric exchange only in the floodplains of the Willamette, Marys, and Millrace. We need to be consistent with these policies.

The SWMP tried to balance the best practice of avoiding development in floodplains with practical local considerations. It came up with the compromise that: 1) the (largely slow-flow) large river floodplain (Willamette/Marys/Millrace) could tolerate the hydrological impact of balanced cut and fill, so volumetric exchange is allowed; 2) in small stream floodplains in infill areas development would be allowed with flow-through design; and 3) development would be prohibited in small stream floodplains in greenfield areas, where properties are typically large enough to develop outside the floodplain.

CP 4.8.2.c does give direction to develop standards that allow additions to existing structures that are under the threshold of "substantial improvement" (<50% of value) to be constructed with the same design as the existing structure. Since we haven't developed those standards, I could support allowing volumetric exchange for these additions, but maintain the requirement for flow-through design on larger additions or re-development.

Another issue raised by staff is the difficulty for some commercial structures to meet ADA standards without fill at the public entrance. This could be remedied by allowing volumetric exchange (balanced cut and fill) for the public entrance portion of the commercial building.

If you could, I would like staff to be prepared with language that would maintain the current requirement of flow-through design in small stream Partial Protection Floodway Fringe, but add exceptions to allow volumetric exchange for: 1) commercial and residential additions to existing structures, where the addition falls below the threshold of "substantial improvement," and 2) for commercial structures, allowing the minimum fill necessary to provide ADA access to the public entrance of the commercial structure.

Potter, Kelly

From: Potter, Kelly
Sent: Wednesday, February 16, 2011 11:46 AM
To: 'Gervais, Jennifer - FW'
Cc: McConnell, Jeff; Franklin, Lisa; Young, Kevin
Subject: FW: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

Hi Jennifer - One more clarification. On Question 3, the corrected reference should be Section 4.5.110.12.b, since we are directing folks to the fence/wall design standards.

Thanks - Kelly

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From: Potter, Kelly
Sent: Wednesday, February 16, 2011 10:02 AM
To: 'Gervais, Jennifer - FW'
Cc: McConnell, Jeff; Franklin, Lisa; Young, Kevin
Subject: RE: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

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Answer for Question 1: This came from FEMA Region X and the State Department of Land Conservation and Development.

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See you tonight! Kelly

-----Original Message-----

From: Gervais, Jennifer - FW [mailto:Jennifer.Gervais@oregonstate.edu]
Sent: Wednesday, February 16, 2011 7:46 AM
To: Potter, Kelly
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Thanks!

See you tonight,

Jen

_____

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Sent: Tuesday, February 15, 2011 2:02 PM
To: hannarm@comcast.net; Gervais, Jennifer - FW; jamesfeldmann@yahoo.com; Jasmin; jim.ridlington@comcast.net; WWRWL45@gmail.com; Reese, Steve; tbabernathy@fedins.com; howellt@peak.org; thowell@co.linn.or.us
Cc: Extrom, Joan; Crowell, Sharon; Young, Kevin; Mark Lindgren; McConnell, Jeff; Franklin, Lisa
Subject: Memo Regarding Issues Raised for FEMA Update Project Legislative Amendment to the Land Development Code (LDT10-00001)

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Kelly

<<02-15-11 PC Memo Re Issues Raised.pdf>>

Kelly Potter, Senior Planner
City of Corvallis Planning Division
501 SW Madison Avenue
P.O. Box 1083
Corvallis, OR 97339

(541) 766-6908
kelly.potter@ci.corvallis.or.us

EXHIBIT VIID - ADDITIONAL TESTIMONY - PAGE 8

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
(FEMA has not yet conducted studies on properties that contain streams, but are not labeled as "High" or "Partial" protection. For those properties, 100-yr. Floodplain studies may be required as part of future development proposals.)

Lorita - The FEMA 100-year Floodplain is shrinking from the yellow area down to the area that is shown in blue cross-hatch. However, please note that the 0.2-ft. Floodway boundary still covers a good portion of your site. That Floodway is the area between the magenta-colored lines.
Kelly

Data on these maps are based on aerial photography and other information sources, which may not be as precisely accurate as you need for floodplain insurance purposes. If floodplain boundaries are very close to structures on this map, check with Engineer Lisa Franklin {(541) 766-6908 or lisa.franklin@ci.corvallis.or.us} to see if she can assist you in more definitively locating the features. Ultimately, a property survey is the most accurate way to locate them.

CORVALLIS PLANNING DIVISION
2300 NW WALNUT BLVD.
(TEMPORARY LOCATION)
CORVALLIS, OR 97330

541.766.6908
PLANNING@CI.CORVALLIS.OR.US

2605 NW Elmwood - Schrank
Mail To: Lorita Shrank, 25202 Butler Rd., Junction City, OR 97448

Legend
- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)
PROTECTION
- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)
Protection Level
- HIGH
- PARTIAL
- Streams

EXHIBIT VIID - ADDITIONAL TESTIMONY - PAGE 9

Potter, Kelly

From: Potter, Kelly
Sent: Tuesday, March 01, 2011 8:32 AM
To: 'aballeby@msn.com'
Cc: Franklin, Lisa
Subject: RE: Flood Plain updates
Attachments: 1520 SW Birdie Dr - Balleby.pdf

Hello Anita -

I have a number of pieces of information for you.

First, attached is a map of your property at 1520 SW Birdie Drive that may help explain things. As you can see by the graphic, your structure at 1520 SW Birdie Drive is not shown in the 100-year floodplain. A very small portion of the rear of the property is currently shown in the FEMA 100-year floodplain. This FEMA 100-year floodplain area has a local City designation of High Protection Floodplain. A very small portion of the rear of your property is also in the 0.2-ft. Floodway. The new FEMA maps will show a slightly different 100-year floodplain boundary that still only encompasses a small portion of the rear of your property. The City's High Protection Floodplain boundary will change to match the new FEMA 100-year floodplain boundary. The 0.2-ft. Floodway boundary will not change because that is a locally generated boundary that is not affected by the FEMA maps. Please see the graphic and the legend.

We do have record of a FEMA-approved Letter of Map Revision (LOMR-F that is case no. 05-10-0272A) that involves the property at 1520 SW Birdie Drive. This was a Letter of Map Revision application for your site and several of your neighbors' properties. The structures on most of the properties were approved by FEMA as being outside the 100-year floodplain. The portions of the properties themselves that were within the 100-year floodplain were not approved by FEMA to be removed from it. Those would include the very small portion of 100-year floodplain at the rear of your property. However, the home on your property at 1520 SW Birdie Drive was one of the structures approved by FEMA to be located outside the 100-year floodplain. That finding is consistent with the map I have attached.

FEMA has a number of approved LOMAs and LOMRs that will be revalidated by FEMA when the new FEMA 100-year floodplain maps go into effect. Your case (05-10-0272A) was not on the FEMA-developed list. Therefore, yesterday morning I forwarded your documentation to the state of Oregon FEMA representative so that she can help us to get that case placed on the list. I will keep you apprised of her efforts.

In any event, the floodplain boundaries in the attached graphic are shown to be at the very rear portion of the lot at 1520 SW Birdie Drive and the structure is not shown to be within the 100-year floodplain.

Please let me know if you have any questions about the information I have included in this email. I will be happy to answer them.

Regards - Kelly

Kelly Potter, Senior Planner
City of Corvallis Planning Division
Temporary Location at: 2300 NW Walnut Blvd.
P.O. Box 1083
Corvallis, OR 97339
(541) 766-6908
kelly.potter@ci.corvallis.or.us

From: Anita Balleby [mailto:aballeby@msn.com]
Sent: Friday, February 25, 2011 8:59 AM
To: Potter, Kelly
Subject: Flood Plain updates

Hello Kelly,

I'm writing to ask about the paper work that was sent out a few months back. It indicated that there would be a change to our property regarding flood plain mapping. I wanted to make it to the informational meeting, but missed it.

I've attached a portion of the letter we received showing our Tax Lot Number. Could you please let me know what changes, if any have affected our property?

We went to quite a lot of trouble a few years back to have our property removed from the flood plain and now I'm concerned that has just been undone?

Anita Balleby
aballaby@msn.com
cell 541-231-0104

This is to notify you that the City of Corvallis has proposed a land use regulation that may affect the permissible uses of your property and other properties.

State law (ORS 227.186) requires the City to print the above statement. Please review the following information to determine the extent to which your property or other properties may be affected.

CORVALLIS
ENHANCING COMMUNITY LIVABILITY

NOTICE OF PUBLIC HEARING

Corvallis Planning Commission
Wednesday - February 2, 2011 - 7:00 p.m.
Downtown Fire Station Main Meeting Room
400 NW Harrison Blvd.

TOPIC/CASE: **Legislative Amendment to the Land Development Code to Address FEMA Requirements (LDT10-00001)**

REQUEST: Consider adoption of legislative revisions to the Corvallis Land Development Code to address new federal Emergency Management Agency (FEMA) floodplain maps and regulations.

APPLICANT: City of Corvallis
Community Development Department
Mailing Address: P.O. Box 1083, Corvallis, OR 97339
Office Location: 2300 NW Walnut Blvd., Corvallis, OR 97330

WHY ARE THE CHANGES BEING PROPOSED?

In 2005, FEMA began a nationwide project to update the country's federal Flood Insurance Rate Maps (FIRMs). As part of this FEMA map modernization process, FEMA digitized the current paper FIRM maps associated with the Benton County Flood Insurance Study. No new FEMA studies were done.

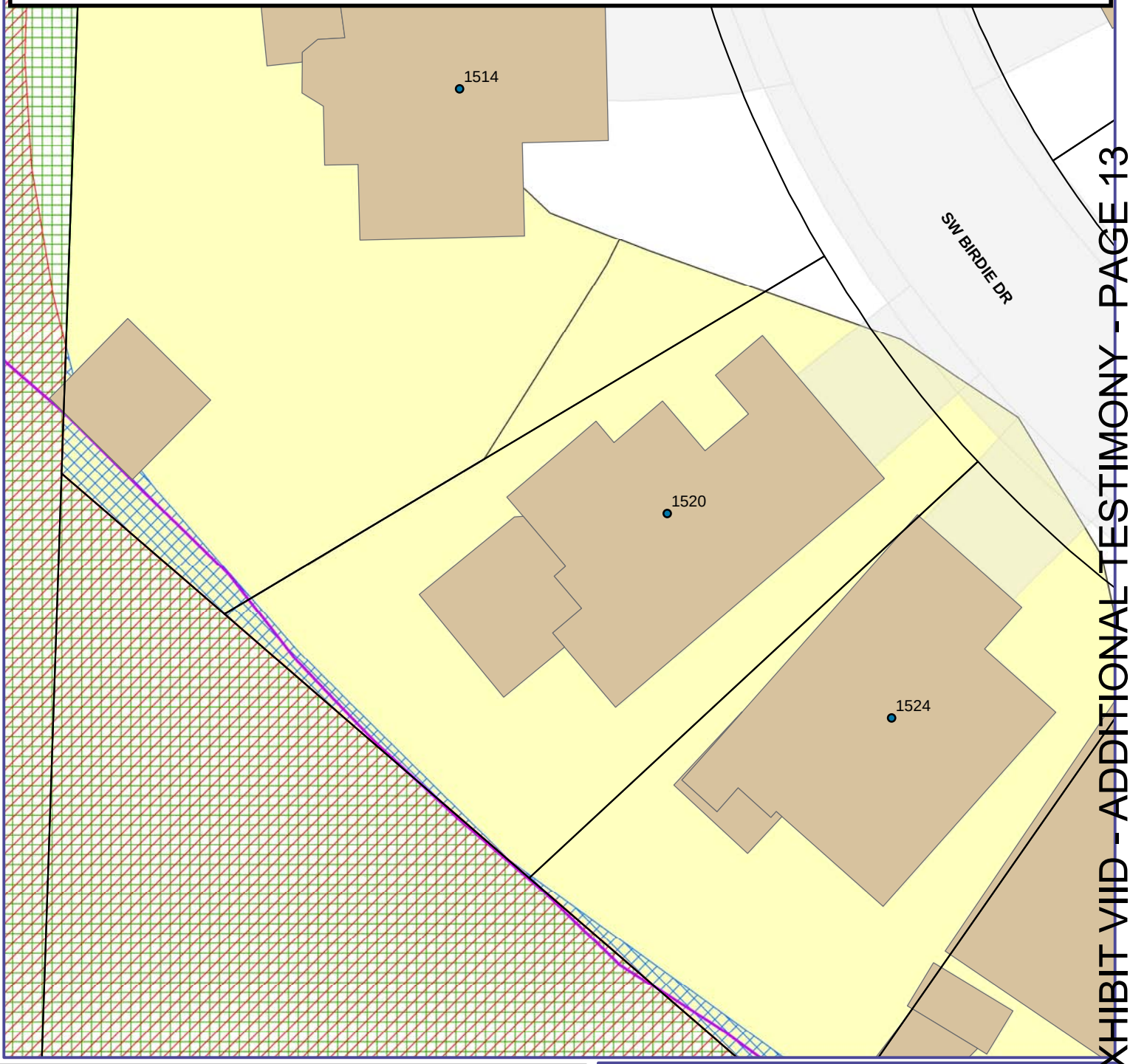
Because the digitization is based on topographic maps, some of the floodplain boundaries are different and more accurate than the boundaries shown on the current paper FIRM maps. In order to continue to participate in the National Flood Insurance Program (NFIP), the City of Corvallis must implement the new FIRM maps and adopt updated land use regulations by June 2, 2011, to fully address the NFIP regulations. Failure to accomplish these tasks by June 2, 2011, will result in the City's suspension from the National Flood Insurance Program.

Cities and unincorporated areas within Benton County will be required to begin using updated maps and regulations on June 2, 2011. Banks and insurance companies must also begin using the maps at that time to determine whether flood insurance is required and to calculate the cost of flood insurance policies.

WHERE DOES THIS PROPOSAL APPLY? The City mailed this notice to all property owners in the City whose property will be or may be affected by the new FEMA Floodplain Maps. The proposed Land Development Code text changes, including the changes in development standards and land uses permitted within the 100-year Floodplain, apply to these properties. If you are interested in seeing the proposed changes, or are interested in seeing how the maps will be affected, please see the "For Further Information" section below.

Property Owner & Mailing Address	Property Map & Tax Lot Number	Will Be or May Be Affected by LDT10-00001
BALLEBY ANITA 1520 SW BIRDIE DR CORVALLIS OR 97333	Map: 12504DD Tax Lot: 14100	WILL BE AFFECTED

COMPARISON OF OLD AND NEW FEMA MAPS - 100-YR. FLOODPLAIN PROTECTIONS
(FEMA has not yet conducted studies on properties that contain streams, but are not labeled as "High" or "Partial" protection. For those properties, 100-yr. Floodplain studies may be required as part of future development proposals.)



Data on these maps are based on aerial photography and other information sources, which may not be as precisely accurate as you need for floodplain insurance purposes. If floodplain boundaries are very close to structures on this map, check with Engineer Lisa Franklin {(541) 766-6908 or lisa.franklin@ci.corvallis.or.us} to see if she can assist you in more definitively locating the features. Ultimately, a property survey is the most accurate way to locate them.

CORVALLIS PLANNING DIVISION
2300 NW WALNUT BLVD.
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1520 SW Birdie Dr. - Balleby

Legend

- address
- City Limits
- Two Tenths Flooday Protections

NEW 100 Year Floodplain Protections Using NEW 2010 FEMA DATA)

PROTECTION

- HIGH
- PARTIAL

OLD 100 Year Floodplain Protections (based on pre-2010 FEMA data)

Protection Level

- HIGH
- PARTIAL
- Streams

EXHIBIT VIID - ADDITIONAL TESTIMONY - PAGE 13

Potter, Kelly

From: Anita Balleby [aballeby@msn.com]
Sent: Tuesday, March 01, 2011 8:46 AM
To: Potter, Kelly
Cc: Franklin, Lisa
Subject: RE: Flood Plain updates

Good morning Kelly and thank you so much.

Your response to my inquiry is thorough, precise, informative and timely. I am very impressed.

I am happy to hear that our property evaluation regarding the flood plain has not changed significantly and thank you for forwarding the data (05-10-0272A) to the Oregon FEMA Representative for processing. This will be very important to us should we ever decide to sell our property.

I will plan on checking back at a later date to see if the FEMA 100-year Floodway data has been corrected to show our update.

Respectfully,

Anita Balleby

Subject: RE: Flood Plain updates
Date: Tue, 1 Mar 2011 08:31:50 -0800
From: Kelly.Potter@ci.corvallis.or.us
To: aballeby@msn.com
CC: Lisa.Franklin@ci.corvallis.or.us

Hello Anita -
I have a number of pieces of information for you.
First, attached is a map of your property at 1520 SW Birdie Drive that may help explain things. As you can see by the graphic, your structure at 1520 SW Birdie Drive is not shown in the 100-year floodplain. A very small portion of the rear of the property is currently shown in the FEMA 100-year floodplain. This FEMA 100-year floodplain area has a local City designation of High Protection Floodplain. A very small portion of the rear of your property is also in the 0.2-ft. Floodway. The new FEMA maps will show a slightly different 100-year floodplain boundary that still only encompasses a small portion of the rear of your property. The City's High Protection Floodplain boundary will change to match the new FEMA 100-year floodplain boundary. The 0.2-ft. Floodway boundary will not change because that is a locally generated boundary that is not affected by the FEMA maps. Please see the graphic and the legend.
We do have record of a FEMA-approved Letter of Map Revision (LOMR-F that is case no. 05-10-0272A) that involves the property at 1520 SW Birdie Drive. This was a Letter of Map Revision application for your site and several of your neighbors' properties. The structures on most of the properties were approved by FEMA as being outside the 100-year floodplain. The portions of the properties themselves that were within the 100-year floodplain were not approved by FEMA to be removed from it. Those would include the very small portion of 100-year floodplain at the rear of your property. However, the home on your property at 1520 SW Birdie Drive was one of the structures approved by FEMA to be located outside the 100-year floodplain. That finding is consistent with the map I have attached.
FEMA has a number of approved LOMAs and LOMRs that will be revalidated by FEMA when the new FEMA 100-year floodplain maps go into effect. Your case (05-10-0272A) was not on the FEMA-developed list.
Therefore, yesterday morning I forwarded your documentation to the state of Oregon FEMA representative so

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that she can help us to get that case placed on the list. I will keep you apprised of her efforts.
In any event, the floodplain boundaries in the attached graphic are shown to be at the very rear portion of the lot at 1520 SW Birdie Drive and the structure is not shown to be within the 100-year floodplain.
Please let me know if you have any questions about the information I have included in this email. I will be happy to answer them.
Regards - Kelly

Kelly Potter, Senior Planner
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From: Anita Balleby [mailto:aballeby@msn.com]
Sent: Friday, February 25, 2011 8:59 AM
To: Potter, Kelly
Subject: Flood Plain updates

Hello Kelly,

I'm writing to ask about the paper work that was sent out a few months back. It indicated that there would be a change to our property regarding flood plain mapping. I wanted to make it to the informational meeting, but missed it.

I've attached a portion of the letter we received showing our Tax Lot Number. Could you please let me know what changes, if any have affected our property?

We went to quite a lot of trouble a few years back to have our property removed from the flood plain and now I'm concerned that has just been undone?

Anita Balleby
aballaby@msn.com
cell 541-231-0104