CITY OF LEBANON

It's easier from here.

Lebanon Municipal Code Title 16: Development Code

Article Two: Land Use and Land Use Zones

Chapter 16.11: Overlay Land Use Zones

16.11.010 OVerview…..……..1

16.11.020 Airport Overlay Zones (AP-OZs)……2

16.11.030 Riparian Protection Overlay Zone (RIP-OZ)……...19

16.11.040 Steep Slope Development Overlay Zone (SSD-OZ)……23

16.11.050 Special Transportation Area Overlay Zone (STA-OZ)……..32

16.11.060 Limited Use Overlay Zone (LU-OZ)……33

16.11.070 Flood Plain Overlay Zone (FP-OZ)……..35

16.11.080 Biosciene and Technology Overlay Zone (BST-OZ)……..48

Adopted by City Council on
December 10, 2008
Amended by City Council on
July 14, 2010, July 13, 2011, January 8, 2020 & May 12, 2021

CITIZEN SERVICES & DEVELOPMENT CENTER

925 Main Street • Lebanon, Oregon 97355 • 541.258.4906 • 541.258.4955 Fax • www.ci.lebanon.or.us

Chapter 16.11: Overlay Land Use Zones
Table of Contents:

16.11.010 Overview 1
A. Background and Purpose 1
B. Introduction 1
1. Overlay Zone Impact Classifications 1
2. Key to Procedures, Standards, and Conditions of Approval 1

16.11.020 Airport Overlay Zones (AP-OZs) 2
A. Introduction to and Purpose of City's Airport Overlay Zones 2
1. Airport Control Zone (AC-OZ) 2
2. Airport Safety Zone (AS-OZ) 2
3. Overall Purpose 3
4. Application of Provisions 3
5. Aviation-Related Definitions 3
B. Location and Description of the Lebanon Airport and Its Zones 3
1. Location 3
2. Airport Use Subzone (AU-OZ) 3
3. Airport Noise Impact Subzone (AN-OZ) 3
4. Airport Direct Impact Area 4
5. Description of Runway Protection Zone and Imaginary Surfaces: Primary, Approach, Transitional, Horizontal, and Conical Surfaces 4
6. Inclusion of Airport Overlay Zones on City's Official Zoning Map 4
C. Notification of Land Use and Permit Applications 8
1. Stipulated Overlay Zones 8
2. Exceptions 8
D. Height Limitations on Allowed Uses in Underlying Zones, and Trimming of Trees 9
E. Application Procedures for Land Use Review 9
F. Land Use Compatibility Requirements 10
1. Overview 10
2. Noise 10
3. Outdoor Lighting 11
4. Glare 11
5. Industrial Emissions 11
6. Communications Facilities and Electrical Interference 11
7. Use Prohibitions in the Runway Protection Zone (RPZ) 11
8. Restrictions on Housing Densities Beyond the Outer Edge of the Airport's RPZ 12
9. Sanitary Landfills 12

10. Dimensional Standards 12
G. Uses Permitted Outright in the Airport Overlay Zone (AU-OZ) 14
1. Customary and Usual Aviation-Related Activities 14
2. Air Passenger and Air Freight Services and Facilities 14
3. Emergency Medical Flight Services 14
4. Law Enforcement and Firefighting Activities 14
5. Search and Rescue Operations 14
6. Flight Instruction Activities, Facilities, and Accessory Structures 14
7. Aircraft Service, Maintenance and Training 14
8. Aircraft Rental 15
9. Aircraft Sales and the Sale of Aeronautic Equipment and Supplies 15
10. Crop Dusting Activities 15
11. Agricultural and Forestry Activities 15
H. Uses Permitted in the Airport Overlay Zone (AU-OZ) Subject to the Acceptance of the Airport Sponsor 15
1. Aeronautic Recreational and Sporting Activities 15
2. Flights Carrying Parachutists, and Parachute Drops onto an Airport 15
I. Conditional Uses and Additional Requirements 16
1. Conditional Uses in Underlying Zone(s) and in the Airport Overlay Zone (AU-OZ) 16
2. Additional Requirements Within the AC Zone (AC-OZ) 16
J. Non-Conforming Uses 16
K. Variances 16
L. Permanent Water Impoundments within Approach Surfaces and the Airport's Direct Impact Zone 17
M. Navigation Easement within Approach Surfaces and the AC Overlay Zone 17
1. State Department of Aviation Requirements 17
2. Land Use Applications that could Require an Avigation Easement 17
3. Acceptable Navigation Easement Form and Filing Requirements 17
Table 16.11.020-2: Summary of Special Uses and Regulations in the Airport Overlay Zones 18
16.11.030 Riparian Protection Overlay Zone (RIP-OZ) 19
A. Purpose 19
B. Establishment of the Riparian Corridor Overlay Zone Boundary 19
1. Two Components 19
Table 16.11.030-1: Minimum Overlay Zone From Top of Bank 19
2. Development Within the Minimum Overlay Zones Developed Prior to 1998 20
3. Development Defined 20

C. Limitations on Use 20
1. Vegetation 20
2. Building, Paving and Grading Activities 20
3. Land Divisions and Property Line Adjustments 21
4. Site Maintenance 21
5. Hazardous Tree Removals 21
D. Procedures 21
1. Review by the Planning Official 21
2. Basic Submittal Requirements 22
3. Supplemental Submittal Requirements 22
E. Hardship Variances 22
F. Restoration and Enhancement Exceptions 22
G. Appeals 22

16.11.040 Steep Slope Development Overlay Zone (SSD-OZ) 23
A. Purpose 23
B. Applicability 23
C. Review 24
D. Development Density Options 24
1. Options 24
2. Calculations 24
3. Option "A" - Average Slope - Minimum Lot Size 24
4. Option "B" Density Transfer Bonus 26
E. Street Grade Standards 27
1. Hillside Contouring 27
2. Street Grades 27
F. Reports Required 28
1. Geotechnical Evaluations 28
2. Grading Plan Report 29
3. Tree Removal Plans and Tree Felling Permits 29
4. Vegetation and Development Plan Report 30
5. Verification of Slope and Grade Percentages 30
G. Urban-Wildland Interface Fire Protection Requirements 31
H. Modification of Transportation Standards for Steep Slope Development 31

16.11.050 Special Transportation Area Overlay Zone (STA-OZ) 32
A. Purpose 32
B. Designated Boundaries 32
C. Characteristics and Requirements of the STA-OZ 32
1. Existing Public Street Spacing and Development Pattern 32
2. Need for Local Access 32
16.11.060 Limited Use Overlay Zone (LU-OZ) 33
A. Purpose 33
B. Requirements 33
C. Procedures 33
D. Criteria 33
E. Adoption 33
F. Official Zoning Map 34
G. Development Provisions 34
H. Recording of Limited Use Overlay Zone (LU-OZ) 34
16.11.070 Flood Plain Overlay Zone (FP-OZ) 35
A. Authority 35
B. Findings of Fact 5435
C. Purpose 5435
D. Methods of Reducing Flood Losses 5435
E. Definitions 5436
F. Applicability 5440
G. Basis of Establishing the Special Flood Hazard Areas 5440
H. Coordination with State of Oregon Speciality Codes 5440
I. Compliance and Penalties for Noncompliance 5441
J. Abrogation and Severability 5441
K. Interpretation 5441
L. Warning and Disclaimer of Liability 5441
M. Administration 5442
N. Establishment of Development Permit

5444
O. Variance Procedure
5445
P. Provision for Flood Hazard Reduction
5446
Q. Utilities and Equipment
5446
R. Tanks
5446
S. Subdivision Proposals & Other Proposed Developments 47
T. Use of Other Base Flood Data 47
U. Structures Located in Multiple or Partial Flood Zones. 47
V. Specific Standards for Riverine Flood Zones 47
16.11.080 Bioscience and Technology Overlay Zone (BST-OZ) 54
A. PURPOSE 54
B. Location of Overlay Zone 54
C. Permitted Uses 54
D. Development of Land 54

Chapter 16.11: Overlay Land Use Zones

16.11.010 OVERVIEW

A. Background and Purpose

1. An **Overlay zone** is an area where additional requirements are superimposed upon those of the base or underlying zone. An overlay zone addresses special land use circumstances or environmental safeguards unique to the property or properties. Properties within an overlay zone are subject to the requirements and regulations of both the base zone and the overlay zone. Where the standards of the overlay and base zone are different or in conflict, the more restrictive standards shall apply.
2. The Lebanon Development Code contains several overlay Zones, including the following: Airport; Riparian Protection; Special Transportation Area, Steep Slopes, Limited Use, and Flood Plains.

B. Introduction

1. **Overlay Zone Impact Classifications**
   - **a.** The Impact Classifications for the Overlay Zones are significantly different than those discussed in Chapter 16.03, and applied in Chapters 16.05 through 16.11.
   - **b.** The land uses are divided into Impact Classifications by the degree of impacts that the uses could reasonably be expected to exert on the Overlay Zones, or rather the attributes or values that the Overlay Zones are designed to protect.
   - **c. Class I Impacts:** The impacts or latent conflicts of the land use are so minimal that the land use can be conducted without special mitigation measures beyond those standards of the existing base zone.
   - **d. Class II Impacts:** The impacts or latent conflicts of the land use are significant enough to warrant special mitigation measures as prescribed by the standards of the Overlay Zone.
   - **e. Class III Impacts:** The impacts or latent conflicts of the land use are substantial and warrant significant mitigation as described by the standards of the Overlay Zone.
2. **Key to Procedures, Standards, and Conditions of Approval**
   - **a. Outright Permitted Uses with Site Review and Building Permit: "OP"** means the use is permitted outright and a **Building Permit** is issued after a **site review** determines that all setbacks and other lot and building site requirements are satisfied.
   - **b. Permitted Uses with Ministerial Review: "MR"** approval is gained through a ministerial review process.
   - **c. Permitted with Administrative Review**: **"AR"** means the use is permitted through an Administrative Review process that takes into account all applicable requirements.
   - **d. Permitted with Conditional Use Approval: "CU"** means the use is permitted with a Conditional Use approval (Chapter 16.21).
   - **e. Site Reviews:** The processing of a variety of land use applications may also include detailed site reviews (site plan reviews). These requirements are addressed in LDC Chapters 16.21 – 16.24 (Article Four).

f. Decision Criteria and/or Additional Conditions of Approval: The standards and review processes outlined in this Code in **Article Three: Community Development and Use Standards** and in **Article Four: Land Use And Development Review/Decision Requirements And Procedures**, as well as applicable Overlay Zones (Chapter 16.11) may set additional decision criteria and/or conditions of approval.

g. Not Permitted: The code provisions are also intended to make it more difficult to place incompatible uses near one another; an **"N"** designation means the use is not permitted.

(1) Existing Uses. The "Not Permitted" ("N") designation is not retroactive and does not impact existing uses.

(2) No New Uses. The "Not Permitted" ("N") designation indicates that no new uses of this type are allowed on a property to which this designation applies.

16.11.020 AIRPORT OVERLAY ZONES (AP-OZS)

A. Introduction to and Purpose of City's Airport Overlay Zones

The sponsor of the Lebanon airport is the Oregon Department of Aviation. For applicable Oregon Revised Statutes (ORS) and Oregon Administrative Rules (OARs), see the Oregon Department of Aviation.

As shown in **Table 16.11.020-1**, the City of Lebanon has two primary airport overlay zones: the Airport Control Zone (AC-OZ), and the Airport Safety Zone (AS-OZ). Each primary airport overlay zone is comprised of two or more subzones or areas.

1. Airport Control Zone (AC-OZ)

a. The AC Zone is composed of the Airport Noise Impact Zone (AN-OZ) and the Airport Use Zone (AU-OZ) (see **Table 16.11.020-1** and **Figure 16.11.020-1**).

b. The primary purpose of this zone is to promote safe and viable use of the airport by establishing criteria for compatibility of land uses.

2. Airport Safety Zone (AS-OZ)

a. The Airport Safety Zone (AS-OZ) is composed of the "imaginary" Direct Impact Area, and the airport's "imaginary" surfaces and zones, including Approach Surfaces, Transitional Surfaces, Horizontal Surfaces, Conical Surfaces, and Runway Protection Zones (see **Table 16.11.020-1** and **Figure 16.11.020-2**).

b. The primary purpose of this zone is to promote aviation safety by prohibiting structures, trees, and other objects of natural growth from penetrating airport imaginary surfaces as defined in applicable OARs.

Table 16.11.020-1: Overview of the Airport Overlay Zones

Airport Control Zone (AC-OZ)	Airport Safety Zone (AS-OZ)	
Airport Noise Impact Subzone (AN-OZ) Airport Use Subzone (AU-OZ) Also encompasses the Runway	Airport Direct Impact Area	"Imaginary" Surfaces and Zones
		Primary Surface; Runway Protection Zone; Approach Surfaces; Transitional Surface; Horizontal Surface; Conical Surface

3. Overall Purpose

The overall purpose of these two overlay zones is to encourage and support the continued safe operation and vitality of this public use airport in the Lebanon area. This is to be accomplished by establishing compatibility and safety standards to promote air navigational safety and to reduce potential safety hazards for persons living, working or recreating near such a public use airport. These standards will restrict incompatible land uses and airspace obstructions around the airport in an effort to maintain the airport's maximum benefit. Specific use limitations apply to the overlaying AC-OZ, the AS-OZ, and/or their subcomponents. Any uses permitted outright or by conditional use in the underlying zone are allowed except as provided for in 16.11.020.F. Incompatible uses may include the height of trees, buildings, structures or other items and uses that would be subject to frequent aircraft over-flight or might intrude into areas used by aircraft.

4. Application of Provisions

The provisions of this section shall only apply as stipulated to the areas located within the Lebanon City Limits and under the specified airport overlay zone: the Airport Control Overlay Zone (AC-OZ), and the Airport Safety Overlay Zone (AS-OZ), and/or their subcomponents. In any land use zone subject to the AC-OZ and/or AS-OZ, the requirements and standards of this section shall apply as stipulated in addition to those specified in the ordinance for the underlying land use zone. If a conflict in regulations or standards occurs, the more restrictive provisions shall govern.

5. Aviation-Related Definitions

See Aviation-Related Definitions Section in the Glossary, Chapter 16.32, of this Development Code**.**

B. Location and Description of the Lebanon Airport and Its Zones

1. Location

The State's Public Use Airport in the City of Lebanon is currently located 1 mile west of the downtown area at 44ºº31'47"N, 122ºº55'46"W. It has an Elevation - 344'. The single Runway is on a north-south axis; it is 2877' long and 50' wide, with an Asphalt Surface (see **Figure 16.11.020-1**).

2. Airport Use Subzone (AU-OZ)

The Use Zone of the Lebanon Airport is identical to the property line of the Airport (see **Figure 16.11.020-1**).

3. Airport Noise Impact Subzone (AN-OZ)

The perimeter of this boundary (see **Figure 16.11.020-1**) shall be 1,500 feet from the edge of the runway, or within established noise contour boundaries exceeding on a daily average 55 LDN noise contour as established by valid scientific studies by the Oregon Department of Aviation.

4. **Airport Direct Impact Area**

   The area located within 5,000 feet edge of the airport's runway(s), excluding lands within the runway protection zone and approach surface (see **Figure 16.11.020-2**).

5. **Description of Runway Protection Zone and Imaginary Surfaces: Primary, Approach, Transitional, Horizontal, and Conical Surfaces**

   The Lebanon Airport is currently classified as a utility airport and is designed to handle only visual approaches; it has the following "imaginary" surfaces:

   a. **Primary Surface:** a rectangular shape centered longitudinally on the runway with dimensions of 250' wide by 3,277' long. The primary surface extends 200 feet beyond each end of the runway's hard surface (see **Figure 16.11.020-2**).

   b. **Runway Protection Zone (RPZ):** a trapezoidal shaped area at each end of the primary surface with dimensions of 250' wide at the end of the runway by 1,000' long, with a width of 450' at the far end of the trapezoid, with an upward approach slope at a 20:1 ratio, one-foot vertical for each 20 feet horizontal (see **Figure 16.11.020-2**).

   c. **Approach Surfaces:** a trapezoidal shaped visual approach surface at each end of the primary surface by 5,000' long, with a width of 1,250' at the far end of the trapezoid, with an upward approach slope at a 20:1 ratio, one-foot vertical for each 20 feet horizontal (see **Figure 16.11.020-2**).

   d. **Transitional Surface:** a surface that extends upward and outward from each side of the primary surface at 90 degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each foot vertically from the sides of the primary and approach surfaces to the point of intersection with the horizontal and conical surfaces (see **Figure 16.11.020-3**).

   e. **Horizontal Surface:** a horizontal plane 150 feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the primary surface of each runway of each airport and connecting the adjacent arcs by lines tangent to those arcs. The radius of each arc is 5,000 feet for all runways designated as utility (see **Figure 16.11.020-3**).

   f. **Conical Surface:** a surface that extends outward and upward from the periphery of the horizontal surface at a slope of 20:1 for a horizontal distance of 4,000 feet and a vertical height of 350 feet above the airport elevation (see **Figure 16.11.020-3**).

6. **Inclusion of Airport Overlay Zones on City's Official Zoning Map**

   The Lebanon Airport's elevation, the airport noise impact zone, and the location and dimensions of the runway, primary surface, runway protection zone, approach surface, horizontal surface, conical surface, transitional surface, and airport use zone shall be delineated and subject to the airport overlay zones as described herein, and shall be made part of the official Zoning Map (see **Figures 16.11.020-1** through **16.11.020-3**). All lands, waters and airspace, or portions thereof, that are located within these boundaries or surfaces are subject to the requirements of the airport overlay zones as applicable.

Figure 16.11.020-1: Lebanon Airport's Airport Control Overlay Zone (AC-OZ)

Showing the Runway, Airport Noise Impact Subzone, and Airport Use Subzone

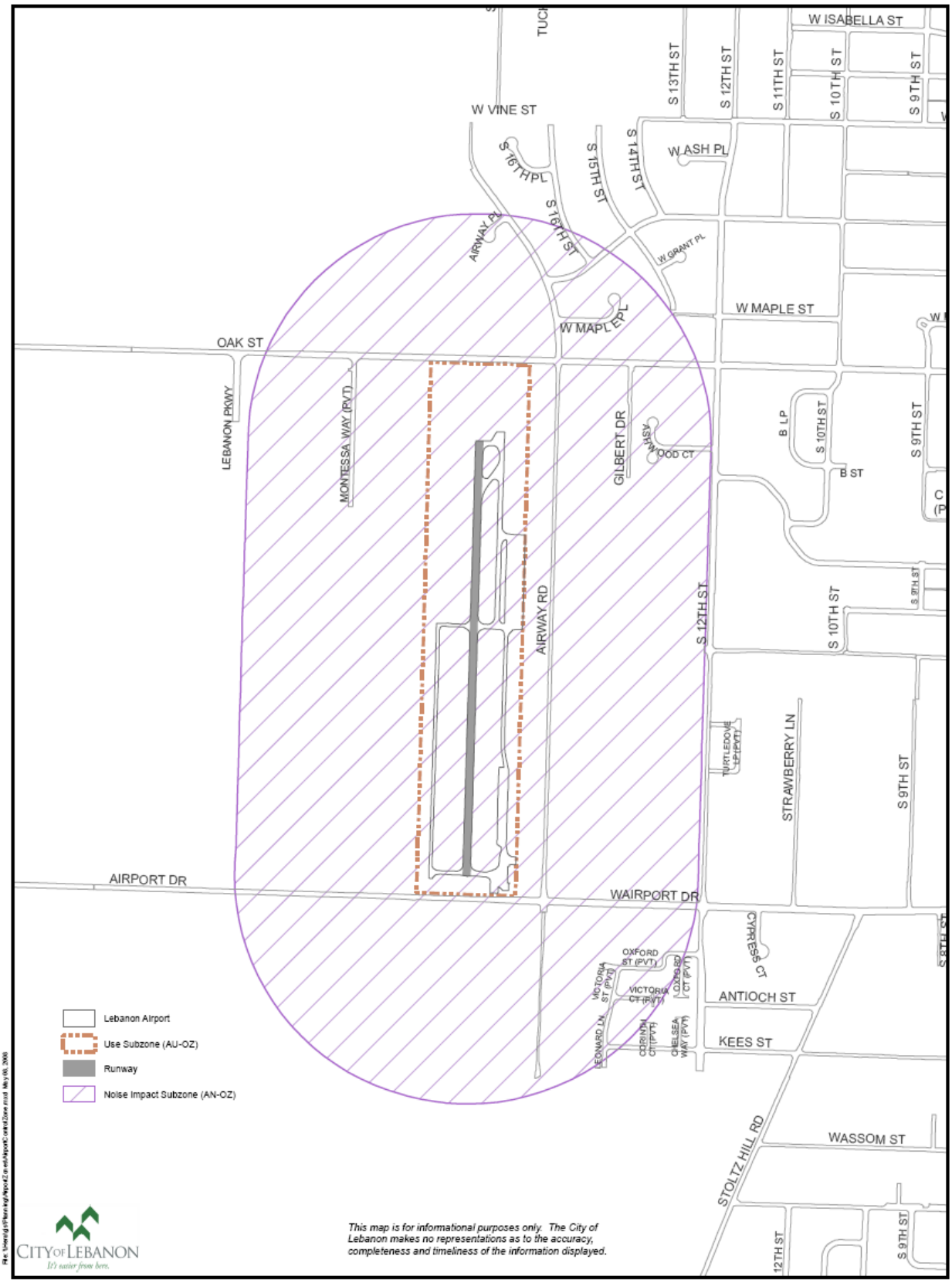


Figure 16.11.020-2: Lebanon Airport's Airport Safety Zone (AS-OZ)

Showing the Runway, Primary Surface, Airport Direct Impact Area, Runway Protection Zone, Approach Surfaces

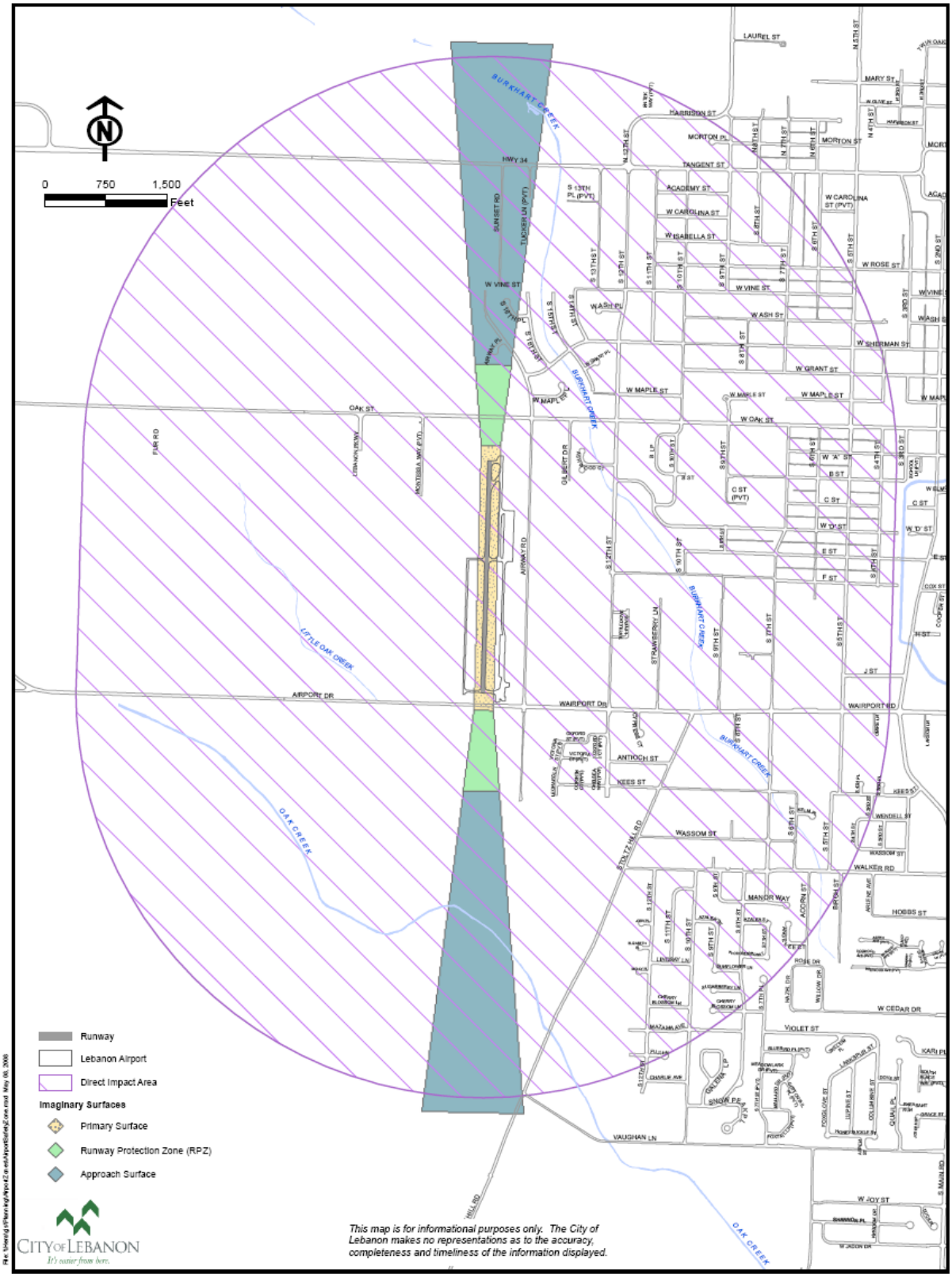
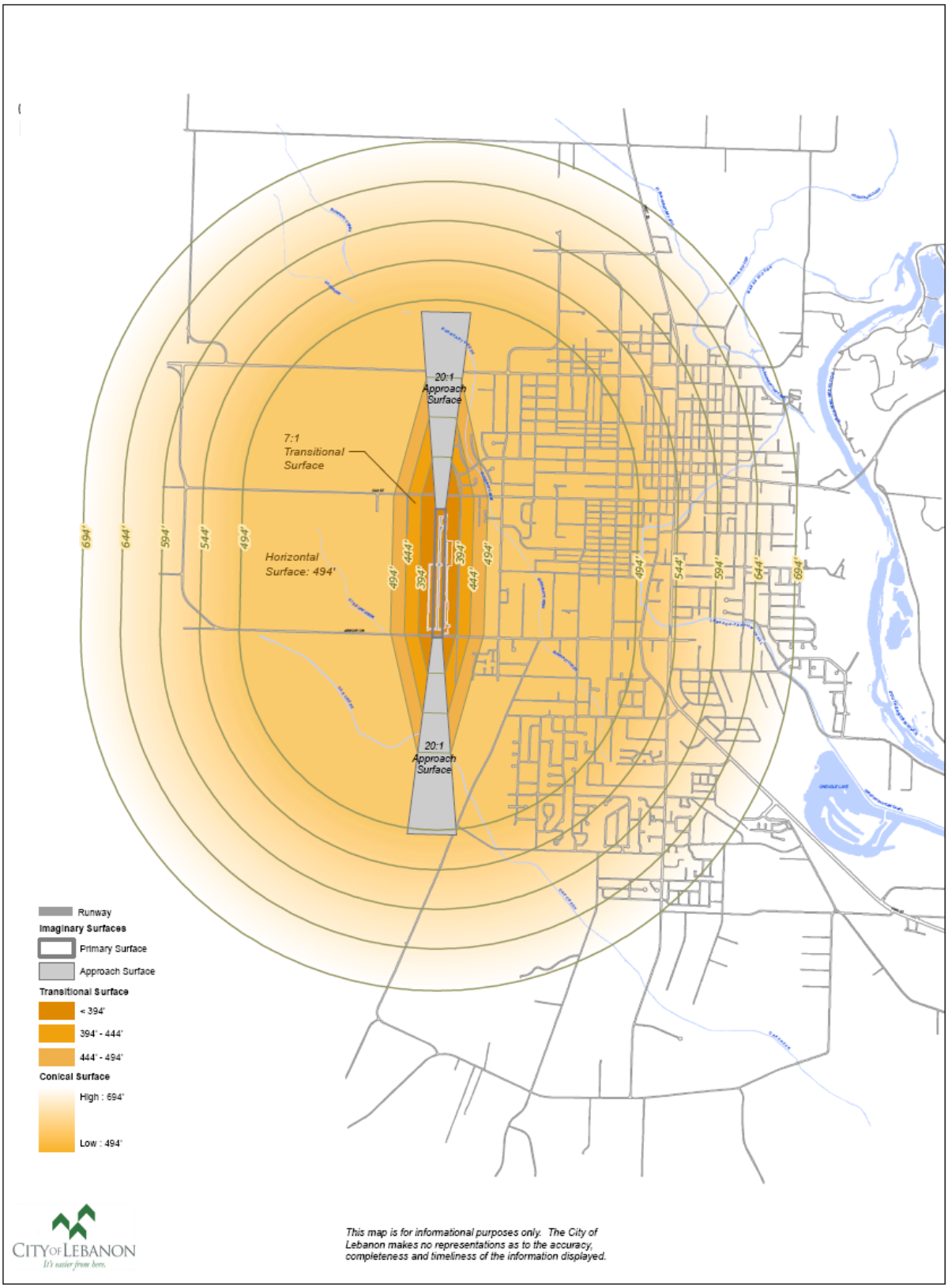


Figure 16.11.020-3: Lebanon Airport's Airport Safety Zone (AS-OZ)

Showing the Runway, Primary Surface, Transitional Surfaces, Horizontal Surface, and Conical Surface



C. Notification of Land Use and Permit Applications

Within the described overlay zones and/or their subcomponents, except as otherwise provided herein, written notice of applications for land use or limited land use decisions, including comprehensive plan or zoning amendments, shall be provided to the airport sponsor in the same manner as notice is provided to property owners entitled by law to written notice of land use or limited land use applications. At the time of adoption of this Code, the airport sponsor is the Oregon Department of Aviation. Hereafter in this Code, the sponsor will be referenced as the Oregon Department of Aviation for administrative convenience, but the provisions of this Code apply as to any lawful successor-in-interest to the Oregon Department of Aviation. Notices are subject to the following provisions and exceptions.

1. Notice Requirements

Notice shall be provided to the airport sponsor (the Oregon Department of Aviation) when the property, or a portion thereof, that is subject to the land use or limited land use application is located within 1,500 from feet from both sides and ends of a runway (the AC Overlay Zone Area, or Noise Impact Boundary and Airport Use Zone) and/or 5,000 feet from both sides and ends of a runway (the AS overlay zone that includes the Airport Direct Impact Area as well as the Runway Protection Zone and Approach Surface).

a. Notice of land use and limited land use applications shall be provided within the following timelines:

(1) Notice of land use or limited land use applications involving public hearings shall be provided prior to the public hearing at the same time that written notice of such applications is provided to property owners entitled to such notice.

(2) Notice of land use or limited land use applications not involving public hearings shall be provided at least 20 days prior to entry of the initial decision on the land use or limited land use application.

b. Notice of the decision on a land use or limited land use application shall be provided to the airport sponsor (Oregon Department of Aviation) within the same timelines that such notice is provided to parties to a land use or limited land use proceeding.

2. Notice of Water Impoundment

A person submitting a land use application or limited land use application that will result in a water impoundment larger than ¼ acre within 10,000 feet of an airport shall provide notice of the application to the Oregon Department of Aviation.

3. Exceptions

Notices required under Paragraphs “a” and “b” directly above of this section need not be provided to the airport sponsor (Oregon Department of Aviation) where the land use or limited land use application meets **all** of the following criteria:

a. Allows structures of less than 35 feet in height;

b. Involves property located entirely outside the **Approach Surface and Transition Surface**;

c. Does not involve industrial, mining or similar uses that emit smoke, dust or steam; sanitary landfills or water impoundments; or radio, radiotelephone, television or similar transmission facilities or electrical transmission lines; and

d. Does not involve wetland mitigation, enhancement, restoration or creation.

D. Height Limitations on Allowed Uses in Underlying Zones, and Trimming of Trees

All uses permitted by the underlying zone shall comply with the height limitations in this Section. When height limitations of the underlying zone are more restrictive than those of the airport overlay zones, the underlying zone height limitations shall control.

1. Except as provided in subsections (b) and (c) immediately following, no structure or tree, plant or other object of natural growth shall penetrate an airport imaginary surface.

2. For areas within **Airport Imaginary Surfaces** but outside the **Approach** and **Transition Surfaces**, where the terrain is at higher elevations than the airport imaginary surfaces such that existing structures and permitted development penetrate or would penetrate the airport imaginary surfaces, the City may authorize structures up to 35 feet in height.

3. Other height exceptions or variances may be permitted when supported in writing by the airport sponsor (Oregon Department of Aviation) and the FAA. Applications for height variances shall follow the procedures for other variances and shall be subject to such conditions and terms as recommended by the Department of Aviation and the FAA.

4. Trimming Trees: The airport sponsor (Oregon Department of Aviation), or its agents, shall be permitted (at times and under stipulations mutually agreed to in writing by property owners and the airport sponsor or its agents) to enter onto private property to reduce the height of trees that exceed the height limitations herein established. The airport sponsor, and/or its agents shall be responsible for all such work and legally liable for any claims of damage caused by such work.

E. Application Procedures for Land Use Review

An applicant seeking a land use or limited land use approval in an area within the airport overlay zones shall provide the following information in addition to any other information required in the permit application:

1. A map or drawing showing the location of the property in relation to the **Airport Imaginary Surfaces**. The City's Community Development Division shall provide the applicant with appropriate base maps upon which to locate the property.

2. Elevation profiles and a site plan, both drawn to scale, including the location and height of all existing and proposed structures, measured in feet above mean sea level.

3. And, additionally, if a **height variance** is requested, **letters of support** from the airport sponsor (Oregon Department of Aviation) and the FAA as well. The letter(s) shall include specific references to the particular variance and proposed findings for approval.

F. Land Use Compatibility Requirements

1. Overview

Applications for land use or building permits for properties within the boundaries of the AC overlay zone and/or the airport imaginary surfaces stipulated below in this subsection shall comply with the requirements of this section as provided herein. When compatibility issues arise, the Planning Official or Hearings Body shall take reasonable steps to eliminate or minimize the incompatibility by choosing the most compatible location, design, or conditions for the boundary or use [see applicable ORS and OARs]. Decisions on compatibility shall further the State's Policy established by Applicable ORS: *In recognition of the importance of the network of airports to the economy of the state and the safety and recreation of its citizens, the policy of the State of Oregon is to encourage and support the continued operation and vitality of Oregon's airports.* To further these ends, the Planning Official or Hearings Body may impose reasonable conditions for new uses at the airport to ensure compatibility with existing and planned land uses surrounding the airport [Applicable ORS and OARs]. In addition, the Planning Official or Hearings Body may impose reasonable conditions to protect the public safety [see applicable ORS and OARs]. *"Compatible," as used in this section, is not intended as an absolute term meaning no interference or adverse impacts of any type with surrounding land uses* [see applicable ORS and OARs].

2. Noise

Within airport **Noise Impact Zone (AN-OZ)**, land uses shall be established consistent with the levels identified in applicable ORS and OARs.

a. Applicants for any subdivision or partition approval or other land use approval or building permit affecting land within airport noise impact boundaries, shall sign and file with the City of Lebanon and record in the Linn County Book of Records, a **Declaration of Anticipated Noise** declaring that the applicant and his successors will not now, or in the future complain about or otherwise contest or challenge the allowed airport activities at the adjacent airport. (The City may provide a **Model Declaration** based on a state template.)

b. In areas where the noise level is anticipated to be at or above 55 Average Day-Night Sound Level (Ldn), prior to issuance of a building permit for construction of a noise sensitive land use (real property normally used for sleeping or as a school, church, hospital, public library or similar use), the permit applicant shall be required to demonstrate that a noise abatement strategy will be incorporated into the building design that will achieve an indoor noise level equal to or less than 55 Ldn. *[NOTE: FAA Order 5100.38A, Chapter 7, provides that interior noise levels should not exceed 45 decibels in all habitable zones.]*

3. Outdoor Lighting

No new or expanded industrial, commercial or recreational use shall project lighting directly onto an existing **Runway** or **Taxiway** or into existing airport **Approach Surfaces** except where necessary for safe and convenient air travel. Lighting for these uses shall incorporate shielding in their designs to reflect light away from airport approach surfaces [see applicable ORS and OARs]. No use shall imitate airport lighting or impede the ability of pilots to distinguish between airport lighting and other lighting.

4. Glare

No glare producing material, including but not limited to unpainted metal or reflective glass, shall be used on the exterior of structures located within an **Approach Surface** and/or the **AC Zone** lands where glare could impede a pilot's vision.

5. Industrial Emissions

No new industrial, mining or similar use, or expansion of an existing industrial, mining or similar use, shall, as part of its regular operations, cause emissions of smoke, dust or steam that could obscure visibility within **Airport Approach Surfaces**, except upon demonstration, supported by substantial evidence, that mitigation measures imposed as approval conditions will reduce the potential for safety risk or incompatibility with airport operations to an insignificant level. The review authority shall impose such conditions as necessary to ensure that the use does not obscure visibility.

6. Communications Facilities and Electrical Interference

No use shall cause or create electrical interference with navigational signals or radio communications between an airport and aircraft. Proposals for the location of new or expanded radio, radiotelephone, and television transmission facilities and electrical transmission lines within the **AC Overlay Zone** shall be coordinated with the Department of Aviation and the FAA prior to approval. Review and approval of all radio, radiotelephone, and television transmission facilities and electrical transmission lines on property located under the **Airport's Imaginary Surfaces** shall be coordinated with the State's Department of Aviation [see applicable ORS and OARs].

7. Use Prohibitions in the Runway Protection Zone (RPZ)

Notwithstanding the underlying zone, the following uses are prohibited in the RPZ [see applicable ORS and OARs]:

a. New residential development.

b. New public assembly facilities.

8. Restrictions on Housing Densities Beyond the Outer Edge of the Airport's RPZ

The areas located directly beyond Lebanon State Airport's RPZ are critical zones where aviation related accidents will most likely occur. To minimize the risks of damage or injury to persons and properties on the ground from potential aviation related accidents, the following densities on housing development are established in portions of the Approach Surface (see Section 16.11.020.B.5.a), the trapezoidal shaped area encompassed by "imaginary" extensions north and south of the Runway Protection Zones (See **Figure 16.11.020-4**):

a. Two dwelling units per acre within 500 feet of the outer edge of the airport's RPZ.

b. Two dwelling units per acre within 500 to 1,500 feet of the outer edge of the RPZ.

c. Four units per acre within 1,500 to 3,000 feet of the outer edge of the RPZ.

9. Sanitary Landfills

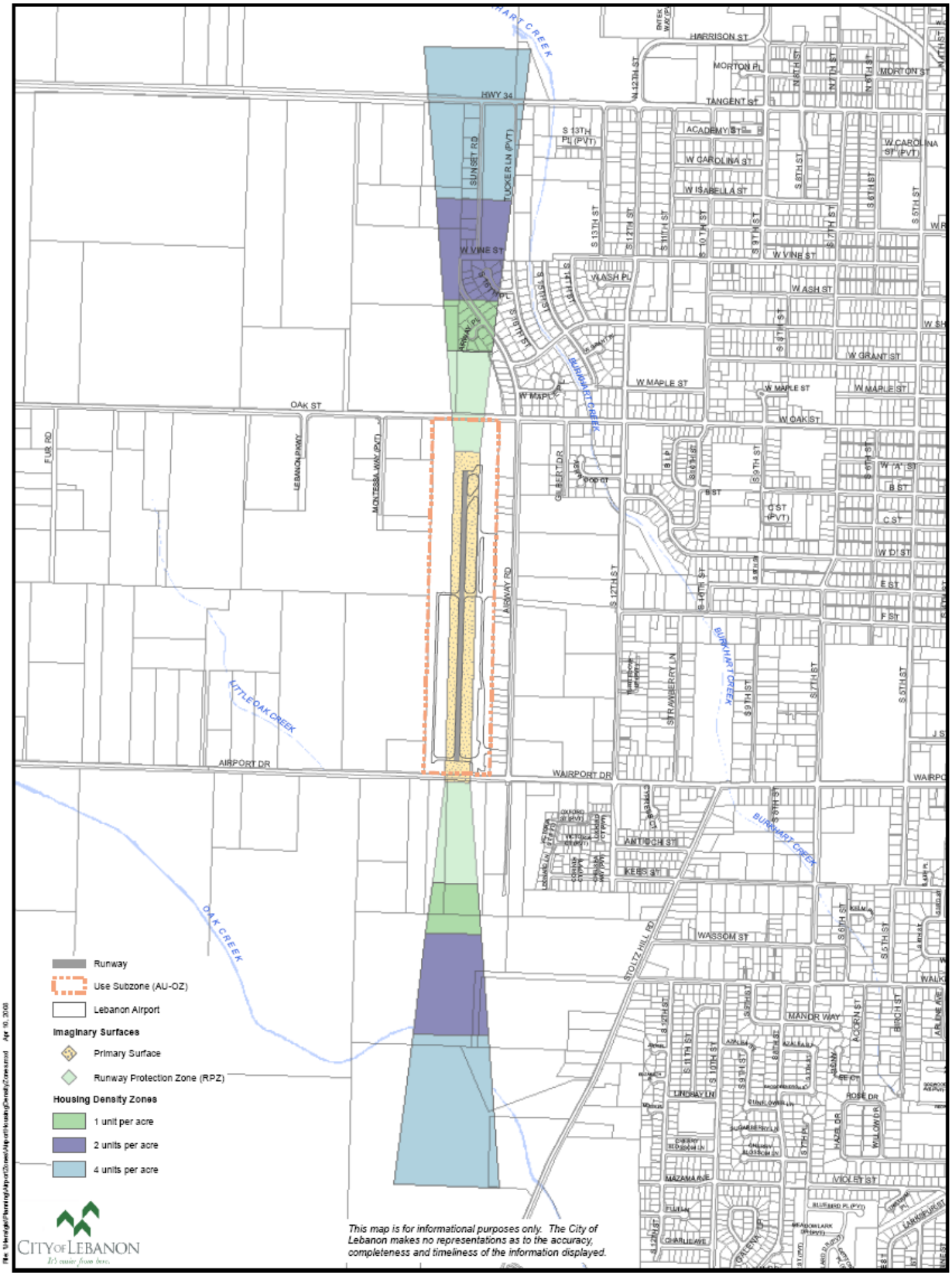
No sanitary landfills shall be permitted within 5,000 feet of the airport runway if it is to be used by only piston-type aircraft, or within 10,000 feet of the airport runway if it will be used by turbojet aircraft.

10. Dimensional Standards

a. Minimum lot size and setbacks shall be those indicated in the underlying zone with which the AC Zone or AS Zone is combined.

b. Where an area is covered by more than one height limitation, the more restrictive shall prevail.

Figure 16.11.020-4: Lebanon Airport's Restrictions on Housing Densities Beyond the Outer Edge of the Airport's RPZ



G. Uses Permitted Outright in the Airport's Use Zone (AU-OZ)

The following uses and activities are permitted outright in the Airport's Use Zone [see applicable ORS and OARs]:

1. Customary and Usual Aviation-Related Activities

Includes but is not limited to takeoffs and landings; aircraft hangars and tie-downs; construction and maintenance of airport facilities; fixed based operator facilities; a residence for an airport caretaker or security officer; and other activities incidental to the normal operation of an airport. Except as provided in this ordinance, "customary and usual aviation-related activities" do not include: [1] residential, and [2] non-aviation related commercial, industrial, manufacturing and other uses.

2. Air Passenger and Air Freight Services and Facilities

Such services and facilities must be at levels consistent with the classification and needs identified in the Oregon Department of Aviation Airport System Plan, as determined by the airport sponsor.

3. Emergency Medical Flight Services

Includes activities, aircraft, accessory structures, and other facilities necessary to support emergency transportation for medical purposes. Emergency medical flight services do not allow the establishment of hospitals, medical offices, medical labs, medical equipment sales, and other similar uses in the AU-OZ.

4. Law Enforcement and Firefighting Activities

Includes aircraft and ground-based activities, facilities and accessory structures necessary to support federal, state or local law enforcement or land management agencies engaged in law enforcement or firefighting activities. Law enforcement and firefighting activities include transport of personnel, aerial observation, and transport of equipment, water, fire retardant and supplies.

5. Search and Rescue Operations

Includes aircraft and ground based activities that promote the orderly and efficient conduct of search or rescue related activities.

6. Flight Instruction Activities, Facilities, and Accessory Structures

Includes such facilities and services as are located at airport sites that provide education and training directly related to aeronautical activities. Flight instruction includes ground training and aeronautic skills training, but does not include schools for flight attendants, ticket agents or similar personnel.

7. Aircraft Service, Maintenance and Training

Includes activities, facilities and accessory structures provided to teach aircraft service and maintenance skills and to maintain, service, refuel or repair aircraft or aircraft components. "Aircraft service, maintenance and training" includes the construction and assembly of aircraft and aircraft components for personal use, but does not include activities, structures or facilities for the manufacturing of aircraft or aircraft-related products for sale to the public.

8. **Aircraft Rental**

   Includes activities, facilities and accessory structures that support the provision of aircraft for rent or lease to the public.

9. **Aircraft Sales and the Sale of Aeronautic Equipment and Supplies**

   Includes activities, facilities and accessory structures for the storage, display, demonstration and sales of aircraft and aeronautic equipment and supplies to the public but not including activities, facilities or structures for the manufacturing of aircraft or aircraft-related products for sale to the public.

10. **Crop Dusting Activities**

    Includes activities, facilities and structures accessory to crop dusting operations. Crop dusting activities include, but are not limited to, aerial application of chemicals, seed, fertilizer, defoliant and other chemicals or products used in a commercial agricultural, forestry or rangeland management setting.

11. **Agricultural and Forestry Activities**

    Includes activities, facilities and accessory structures that qualify as a "farm use" as defined in applicable ORS or "farming practice" as defined in applicable ORS.

H. Uses Permitted in the Use Zone (AU-OZ) of the Airport Subject to the Acceptance of the Airport Sponsor

In addition to the uses allowed in the underlying Zone, the following uses and activities and their associated facilities and accessory structures are permitted in the Use Zone of the Lebanon Airport upon demonstration of acceptance by the airport sponsor (Oregon Department of Aviation) [see applicable ORS and OARs].

1. **Aeronautic Recreational and Sporting Activities**

   Includes activities, facilities and accessory structures at airports that support recreational usage of aircraft and sporting activities that require the use of aircraft or other devices used and intended for use in flight. Aeronautic recreation and sporting activities authorized under this paragraph include, but are not limited to: fly-ins; glider flights; hot air ballooning; ultralight aircraft flights; displays of aircraft; aeronautic flight skills contests; and gyrocopter flights, but do not include flights carrying parachutists or parachute drops (including all forms of skydiving).

2. **Flights Carrying Parachutists, and Parachute Drops onto an Airport**

   Flights carrying parachutists, and parachute drops (including all forms of skydiving) onto an airport, may be permitted but only upon demonstration that the parachutist business has secured approval to use a drop zone that is at least 10 contiguous acres. The configuration of the drop zone shall roughly approximate a square or a circle and may contain structures, trees, or other obstacles only if the remainder of the drop zone provides adequate areas for parachutists to land safely.

I. Conditional Uses and Additional Requirements

1. Conditional Uses in Underlying Zone(s) and in the Airport's Use Zone (AU-OZ)

Within the Airport's Use Zone any uses permitted conditionally in the underlying zone(s) with which the AC Zone is combined shall be allowed conditionally except as provided in Section 16.11.020.F (Land Use Compatibility Requirements) or as outright permitted uses (section 16.11.020.G). Applications may be subject to review under the provisions of Chapter 16.21 of this Code, as well as the provisions directly below.

2. Additional Requirements Within the AC Zone (AC-OZ)

As a condition of approval of any conditional use proposed within the AC Zone (AC-OZ), the Planning Official or Hearings Body may require:

a. An increase in required setbacks.

b. Additional off-street parking and loading facilities and building standards.

c. Limitations on signs or lighting, hours of operation, points of ingress and egress and building heights.

d. Additional landscaping, screening and other improvements.

e. Use of glare-resistant materials in construction or other methods likely to reduce operating hazards.

f. Other conditions considered necessary to achieve compliance with this Code and applicable policies of the comprehensive plan and state law.

J. Non-Conforming Uses

1. These regulations shall not be construed to require the removal, lowering or alteration of any structure not conforming to these regulations. These regulations shall not require any change in the construction, alteration or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this overlay zone.

2. No land use or limited land use approval or other permit shall be granted that would allow a nonconforming use or structure to become a greater hazard to air navigation than it was on the effective date of the airport overlay zones described this Section.

K. Variances

1. Any person desiring to erect or increase the height of any structure or use not in accordance with the provisions of this Code may apply for a variance (see Chapter 16.29 of this Code).

2. Application for Variance must be accompanied by a determination from the Oregon Department of Aviation and the Federal Aviation Administration (FAA) as to the effect of the proposal on the safe and efficient use of navigable airspace.

3. Any variance granted may be conditioned so as to require the owner of the structure to install, operate and maintain obstruction markers, at the owner's expense.

L. Permanent Water Impoundments within Approach Surfaces and the Airport's Direct Impact Zone

1. Any use or activity that would result in the establishment or expansion of a permanent water impoundment shall comply with the requirements of this section [see applicable ORS and OARs].

2. New or expanded permanent water impoundments of one-quarter acre in size or larger shall be prohibited:

a. Within an approach surface and within 5,000 feet from the end of a runway; or

b. On land owned by the airport sponsor (Oregon Department of Aviation) that is necessary for airport operations.

3. New or expanded permanent water impoundments of one-quarter acre in size or larger shall be prohibited within 5,000 feet from the end or edge of a runway, pending a valid and ODA approved Bird Strike Study.

M. Air Navigation Easement within Approach Surfaces and the AC Overlay Zone

1. State Department of Aviation Requirements

The State Department of Aviation, in response to notification by the City of Lebanon of land use actions within the AC Overlay Zone (AC-OZ) or the Approach Surfaces, **may** request in writing that the owners of properties that are the subjects of such applications submit an air navigation easement to the State Department of Aviation and the City of Lebanon as part of the review process**.**

2. Land Use Applications that could Require an Air Navigation Easement

Applications subject to this provision include land use or limited land use decisions for:

a. Building permits.

b. New residential, commercial, industrial, institutional or recreational buildings or structures intended for habitation or occupancy by humans or animals.

c. Expansions of such buildings or structures by the lesser of 50% or 1000 square feet.

3. Acceptable Air Navigation Easement Form and Filing Requirements

a. The air navigation easement shall be in a form acceptable to the airport sponsor (Oregon Department of Aviation).

b. This easement shall be signed and recorded in the deed records of Linn County with copies on file with the airport sponsor and the City of Lebanon.

Table 16.11.020-2: Summary of Special Uses and Regulations in the Airport Overlay Zones

Special Land Uses and Regulations	Airport Overlay Zones (OZs)		
	Airport Safety (AS-OZ)	Airport Control (AC-OZ)	
	"Imaginary" Areas & Surfaces	Airport Use (AU-OZ)	Airport Noise Impact (AN-OZ)
Notice shall be provided to the airport sponsor and the Department of Aviation when the property, or a portion thereof, that is subject to the land use or limited land use application is located within the OZ. ***[see 16.11.020.C]***	**YES** (See Exceptions)	**YES** (See Exceptions)	**YES** (See Exceptions)
Additional Height Limitations ***[see 16.11.020.D]***	**Varies**		
Prohibition on New residential development, and New public assembly facilities. ***[see 16.11.020F.7]***	**RPZ - YES**		
Density of new residential development ***[see 16.11.020.F.8]***	**Portions of the Approach Surface - YES**		
Special Factors or Features Subject to Regulation: Noise, Outdoor Lighting, Glare, Industrial Emissions, Communications Facilities and Electrical Interference, Sanitary Landfills, Permanent Water Impoundments ***[see 16.11.020.F and 16.11.020.L]***	**Varies**		
Customary and Usual Aviation-Related Activities, Air Passenger and Air Freight Services and Facilities, Emergency Medical Flight Services, Law Enforcement and Firefighting Activities, Search and Rescue Operations, Flight Instruction Activities, Facilities, and Accessory Structures, Aircraft Service, Maintenance and Training, Aircraft Rental, Aircraft Sales and the Sale of Aeronautic Equipment and Supplies, Crop Dusting Activities, Agricultural and Forestry Activities ***[see 16.11.020.G]***	**See Underlying Zone**	**OP**	**See Underlying Zone**
(1) Aeronautic recreational and sporting activities, including, but are not limited to: fly-ins, glider flights, hot air ballooning, ultralight aircraft flights, displays of aircraft, aeronautic flight skills contests, and gyrocopter flights. (2) Flights carrying parachutists, and parachute drops including sky-diving (with additional specific requirements). ***[see 16.11.020.H]***	**See Underlying Zone**	**OP** with Acceptance by the Airport Sponsor	**See Underlying Zone**
Additional **discretionary** conditions of approval ***[see 16.11.020.I]***	**Varies**	**YES**	**YES**
State Department of Aviation **discretionary** obstruction markers and tree trimming ***[see 16.11.020.D and 16.11.020.J]***	**YES**	**YES**	**YES**
State Department of Aviation **discretionary** request for submittal of an avigation easement ***[see 16.11.020.M]***	**YES**	**YES**	**YES**

Key: OP = Outright Permitted (Building Permit issued after a site review); MR = Ministerial Review; AR = Permitted with Administrative Review; CU = Conditional Use approval required (Chapter 16.21); N =Not permitted.

16.11.030 RIPARIAN PROTECTION OVERLAY ZONE (RIP-OZ)

A. Purpose

The primary purposes for the creation of the Riparian Protection Overlay Zone (RIP-OZ) along the South Santiam River, Oak Creek, and Cheadle Lake corridors are to: maintain and enhance water quality; prevent property damage during floods and storms; limit development activity in designated riparian corridors; protect native plant species; maintain and enhance fish and wildlife habitats; preserve and where appropriate enhance public access to and from these water corridors; maintain *viewsheds*; and conserve scenic and recreational values of riparian areas.

B. Establishment of the Riparian Corridor Overlay Zone Boundary

The Riparian Protection Overlay Zone (RIP-OZ) consists of two component areas: the area within the channel banks, and the protective overlay zone.

1. Two Components

The two components of the Riparian Protection Overlay Zone (RIP-OZ) are defined as:

a. Top of Bank and Bankfull Stage: The area within the channel limits of a water feature or water body (from top of one bank to top of the opposite bank) listed in Subsection B.1.b immediately. For a given stream, river, or channel the top of bank is the same as the "bankfull stage." The "bankfull stage" is defined as the stage or elevation at which water overflows the natural banks of streams or other waters of the state and begins to inundate the upland.

b. Minimum Overlay Zone From Top of Bank: The overlay zones measured horizontally upland from the top of bank are noted in **Table 16.11.030-1** as follows:

Table 16.11.030-1: Minimum Overlay Zone From Top of Bank

In Cubic Feet Per Second (CFS)

Stream Flow (CFS)	Overlay Zone	Water Body
1,000 CFS or more	75 feet	South Santiam River
Less than 1,000 CFS	50 feet	Oak Creek, Cheadle Lake

c. State or federal laws that regulate protected lands, water, wetland, or habitat areas: The provisions of the Riparian Protection sub-zone do not exempt persons or property from state or federal laws that regulate protected lands, water, wetland, or habitat areas. In addition to the restrictions and requirements of this Chapter, all proposed development activities within any jurisdictional wetland are also subject to state and federal agency standards and approval.

2. Development Within the Minimum Overlay Zones Developed Prior to 1998

Areas developed prior to adoption of the ordinance originally codified with these provisions in 1998 are acknowledged as pre-existing conditions and are allowed to be maintained in their status at the time of adoption of said ordinance.

3. Development Defined

For the purposes of this section of Chapter 16.11, "development" means buildings and any other development requiring a building permit, or any alteration of the RIP-OZ by grading or construction of an impervious surface, including paved or gravel parking areas, or installation of human made materials or devices.

C. Limitations on Use

In addition to the requirements of the primary zone, the following limitations and exceptions shall apply:

1. Vegetation

The removal of native vegetation or the planting of non-native vegetation within the RIP-OZ is prohibited, except for the following uses after Planning Official approval using the standards of Chapter 16.15:

a. Replacement of vegetation with native riparian species as is necessary for restoration activities.

b. Removal of nonnative vegetation and replacement with native plant species, or the removal of Invasive Species as defined by LMC 8.13.

c. For the development of water-related or water-dependent uses, provided they are designed and constructed to minimize impact on the existing riparian vegetation.

d. Removal of emergent in-channel vegetation which has the potential to cause flooding.

e. Removal of excess debris deposited by a flood event.

f. Removal of trees demonstrated to be a potential hazard to property or human life.

g. In-channel erosion or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers or another state or federal regulatory agency.

h. The Planning Official may, upon receipt of a landscape plan, approve new vegetation and other landscape changes with the RIP-OZ, upon reasonable assurance of the protection of existing native riparian vegetation, and the river bank as well as existing viewsheds and rights of public access.

2. Building, Paving and Grading Activities

Within the RIP-OZ, the placement of structures or impervious surfaces, including grading and the placement of fill, is prohibited except as is stated below. Exceptions to the RIP-OZ restrictions may be made for the following uses, providing they are designed and constructed to minimize adverse impacts to the riparian area:

a. Replacement of existing structures with structures located on the original building footprint that does not disturb additional riparian surface areas.

b. Streets, roads, and paths which are included in the City's facility plans or are deemed necessary by the City.

c. Water-related and water-dependent uses, including the drainage facilities, water and sewer utilities, flood control projects, and drainage pumps.

d. Routine maintenance or replacement of existing public facilities projects and public emergencies, including emergency repairs to public facilities.

e. In-channel erosion or flood control measures that have been approved by the Oregon Department of State Lands (DSL), the U.S. Army Corps of Engineers or any other state or federal regulatory agency.

3. Land Divisions and Property Line Adjustments

Land divisions and property line adjustments which result in parcels that cannot be developed in conformance with Riparian Protection Overlay Zone (RIP-OZ) regulations shall be prohibited.

4. Site Maintenance

The limitations imposed by this section do not preclude the routine maintenance of existing site improvements including lawns, natural and planted vegetation and landscaping, and structures. Maintenance trimming of existing trees shall be kept at a minimum and under no circumstances can trimming maintenance be so severe as to compromise the tree's health, longevity, and resource functions. The planting of new vegetation within the RIP-OZ shall be in accordance with Section 16.11.030.C.1 of this Chapter.

5. Hazardous Tree Removals

Hazardous trees are those that pose an obvious and immediate health, safety, or welfare threat to persons or property. Hazardous tree removal, except in emergency circumstances, is required to be reviewed by City staff. Any trees removed are required to be replaced by like native species or alternate approved native species.

D. Procedures

The procedures for reviewing any development within the Riparian Protection Overlay Zone are as follows:

1. Review by the Planning Official

Any proposed development; placement of human-made structures/devices or native vegetation removal proposal within the RIP-OZ shall be submitted to the Planning Official. Depending on the action requested, the Planning Official will process the application as an Administrative Review or refer the proposal to the Planning Commission for a public hearing and decision (see Chapter 16.20 for review provisions).

2. Basic Submittal Requirements

The applicant shall be responsible for the preparation of a map showing the precise location of the top-of-bank, one-hundred-year flood elevation, wetland edge (if present), riparian setback, significant vegetation, site improvements or other relevant primary features. The specific information to be indicated on the map will differ according to application type, and therefore the specific information to be provided by the applicant will be identified by the Planning Official.

3. Supplemental Submittal Requirements

At the time of application the planning official may request that the applicant submit supplemental information, which may include the following:

a. Grading Site Plan. The grading plan shall include information on terrain, drainage, location of proposed and existing structures, and finished elevations.

b. Vegetation Report. This report shall consist of a survey of existing native vegetation and proposed alterations. Where the removal of native vegetation is proposed, measures for re-vegetation and enhancement with native plant species will be included. The City shall have and maintain a list of native vegetation species.

E. Hardship Variances

For any existing lot or parcel demonstrated to have been rendered not buildable by application of this Chapter and/or when a riparian corridor (RIP-OZ) map error has been verified, the property owner may apply for a hardship variance for waiver of land development restrictions and prohibitions. A decision regarding hardship variances will follow the procedures and standards of Chapter 16.29, Variances.

F. Restoration and Enhancement Exceptions

Permanent alteration of the riparian area by placement of structures or impervious surfaces may be permitted by the Planning Official upon demonstration that equal or better protection for the remaining on-site Riparian Protection Overlay Zone area will be ensured through restoration of riparian areas, enhanced buffer treatment or similar measures. In no case shall such alterations occupy more than fifty percent of the width of the riparian area measured from the upland edge of the corridor.

G. Appeals

Planning Official and Planning Commission decisions can be appealed pursuant to the procedures described in Chapter 16.20 of this Code.

16.11.040 STEEP SLOPE DEVELOPMENT OVERLAY ZONE (SSD-OZ)

A. Purpose

Steep Slope Development Overlay Zone (SSD-OZ) ensures that development in areas with Steep Slopes (equal to or greater than 15%):

1. Minimizes the potential for earth movement and resultant hazards to life and property.

2. Protects water quality by minimizing soil erosion and siltation.

3. Retains and protects natural vegetation, natural water features and drainageways, scenic quality and open space by minimizing vegetation removal in sloped areas.

4. Assures the compatibility of new development with surrounding areas.

5. Encourages site and building design that is consistent with the natural topography in order to minimize the cost of providing public infrastructure.

6. Provides for adequate access for emergency services; and otherwise protects the public health and safety.

B. Applicability

1. The Steep Slope Development Overlay Zone shall apply in residential zones within the City Limits and the City's UGA to areas where the percent of slope is 15 percent or greater.

2. Development is prohibited on slopes of equal to or greater than 30 percent unless the Planning Commission finds that adverse project impacts can be effectively mitigated.

3. All proposed development on hillsides with a slope equal to or greater than 15 percent shall be accompanied by detailed site specific investigation and report prepared by an engineering geologist registered in the State of Oregon. This report shall address the physical nature of the site, the impacts of the proposed development and its suitability as presented. See Section 16.11.040.F below for the reports that are required where the buildable portion of the land to be developed exceeds 15 percent average slope.

4. The creation of a lot or parcel through the subdivision or partition process on a site with slope(s) equal to or greater than 30 percent, may only be approved if (a) it is demonstrated to be buildable according to a detailed site specific report prepared by an engineering geologist registered in the State of Oregon as noted above, and **(b)** the lot or parcel meets or exceeds the minimum lot size and frontage requirements for lots and parcels on slopes greater than 15% (see **Table 16.11.040-1**).

5. All grading, retaining wall design, drainage, and erosion control plans for development on Hillside Lands shall be designed by a geotechnical expert (see Section 16.11.3.6 below). All cuts, grading or fills shall conform to Chapter 70 of the Uniform Building Code. Erosion control measures on the development site shall be required to minimize the solids in runoff from disturbed areas.

C. Review

1. Proposed development within a Steep Slope Development Overlay Zone, as determined by the Planning Official, may be reviewed as a:

a. Separate Administrative Review procedure submitted concurrently with the applicable application for the basic land use request (e.g., a Conditional Use, Property Line Adjustment, a Partition, Subdivision Plan, or Planned Development); or,

b. Part of the review process for the basic land use request (e.g., a Conditional Use, Property Line Adjustment, a Partition, Subdivision Plan, or Planned Development).

c. The applicant may request that the proposed steep slope development review process be consolidated with the basic land use request and review process (as noted in Section 16.11.040.C.1.b immediately above).

2. If a proposed development within a Steep Slope Development Overlay Zone is processed as a separate Administrative Review (as per Section 16.11.040.C.1.a immediately above), the decision and conditions of approval will be separate from but in addition to those of the basic land use request process, decision and conditions of approval. Such a separate Administrative Review shall also require a separate fee.

3. If a proposed development within a Steep Slope Development Overlay Zone is processed as a consolidated part of the review process for the basic land use request (as per Section 16.11.040.C.1.b above), the decision and conditions of approval will be part of the basic land use decision and conditions of approval. Such a consolidated review shall not require a separate fee.

4. A complete application together with all required materials shall be submitted to the Planning Official prior to the appropriate review of the request as specified in Chapter 16.20 of this Code.

D. Development Density Options

1. Options

A developer has three options for the development of steeply sloped land. The **first option**, Option "A", is designed to correlate minimum lot sizes to the average slope of the development area. The **second option**, Option "B", is designed to allow for a *density transfer bonus* to stimulate development on those portions of the development area where the slope of the land is less than 15 percent. The **third option** could be a combination of Options "A" and "B" as proposed by the applicant and approved by the review authority.

2. Calculations

All of the calculations noted below as required for the three options, must be performed and certified by a certified professional surveyor.

3. Option "A" - Average Slope - Minimum Lot Size

a. Residential Low Density Zone Development Standards

The site development standards and requirements of the Residential Low Density Zone (Z-RL) shall apply, with the exception of the minimum lot size and duplex standards.

b. Determination of Minimum Lot Size on Steep Slopes – Three Step Process

Determination of minimum lot size where the slope is 15 percent or greater is a 3 step process.

(1) Step "A-1": Determine the **area of the parcel** where the slope of the land is:

Less than 15 percent, (2) From 15 percent to less than 30 percent, (3) 30 percent or greater.

Use the following formula to determine the % of slope:

(**V**/ **H**) x 1 0 0 = % slope

V = Vertical distance between contours (Elevation Change)

H = Horizontal distance between contours

Indicate the portions of the development area that are less than 15 percent; from 15 percent to less than 30 percent; and 30 percent or greater, then use a planimeter to determine the land area of each category.

(2) Step "A-2": Determine the **average slope** of the portion of the development area where the slope of land is from 15 percent to less than 30 percent by using the following formula:

S = 0.00229 **I** x (**L** / **A**)

Where:

S = Average % of slope for the area where the slope ranges from 15 percent to less than 30 percent.

I = Contour interval, (Not greater than 10 feet).

L = Summation of length of the contour lines within the area where the slope is from 15 percent to less than 30 percent.

A =Area in acres of the portion of the parcel where the slope is from 15 percent to less than 30 percent.

(3) Step "A-3": Determine the minimum lot size for the portion of the development area where the slope of the land is greater than 15% by using **Table 16.11.O4O-1**.

Table 16.11.040-1: Minimum Lot Size and Frontage on Slopes Greater Than 15%

Average Slope of Development Site	Minimum Lot Size Per Dwelling Unit	Minimum Frontage Per Lot
15% - < 20%	10,000 Sq, Ft.	75 ft.
20% - <25%	15,000 Sq, Ft.	100 ft.
25% - < 30%	20,000 sq. ft.	125 ft.
30% - <35%	30,000 sq. ft.	150 ft.
> 35%	43,560 sq. ft.	200 ft.

- **Panhandles (Flag Lots)** are permitted only when requirements of this Section pertaining to fire protection and lot size are met and the lot cannot be served with a public street. The panhandles are not counted as part of the minimum lot size.
- Minimum frontage standards for all other lots may be amended by the Review Authority when it is found that the topography or location of natural features prevent achieving the standard.

4. Option "B" Density Transfer Bonus

a. Density Transfers and the Preservation of Natural Slopes

In order to promote the preservation of natural slopes greater than 15 percent, and encourage solar access, development density transfer is encouraged when dividing land. The density transfer is only feasible where there are sizable portions of the development area which have slopes less than 15 percent.

b. Determination of the density transfer bonus on Steep Slopes – Four Step Process

Determination of the density transfer bonus is a 3 step process:

(1) Step "B-1": Determine the area of the parcel where the average slope of *the land* is:

(a) Less than 15 percent.

(b) From 15 percent to less than 30 percent.

(c) 30 percent or greater.

(2) Step "B-2": Determine the average slope of the area of the parcel where the average slope of the land is from 15 percent to less than 30 percent by using the formula identified in Option A, Step 'A-2'.

(3) Step "B-3": Determine the number of potential lots for the total development area which could have been permitted, for the portion of the parcel where the average slope is greater than 15 percent, if the average slope option had been considered by using **Table 16.11.O4O-1** in Option "A", Step "A-3."

(4) Step "B-4": Multiply the number of potential lots by 1.2 to determine the density that may be transferred to those sections of the development area where the slopes are less than 15 percent. In no case shall the density of the developed portion of the site exceed **8** dwelling units per developable acre, (i.e., excluding streets and open space). Land of greater than 15 percent average slope subject to density transfer provisions shall be maintained as permanent open space or dedicated for park use. Modification of standards as stated in Section 16.11.040.H of this Chapter may be applied to the entire development area.

E. Street Grade Standards

1. Hillside Contouring

Streets shall be contoured in hillside areas to minimize environmental and scenic disruption.

2. Street Grades

a. As noted in **Table 16.13.030-2** (Chapter 16.13 of this Code) and in the Lebanon Transportation System Plan, the following Maximum Street Grades are the adopted standards of the City (also duplicated in **Table 16.11.040-2** below).

Table 16.11.040-2: Maximum Street Grades

TYPICAL PARKWAY SEGMENT	TYPICAL ARTERIAL STREET	TYPICAL COLLECTOR STREET	TYPICAL LOCAL STREET (or a Cul-de-sac)
5%	6%	10%	15%

b. Street grades should be less than the 15 percent maximum local street standard specified in Chapter 16.13, and other relevant sections of this Code, except where topographical conditions make it impractical to be less than the 15 percent maximum standard, subject to the following conditions with approval of the City Engineer:

(1) Except for lots, parcels and roads created prior to the adoption of the 1980 Comprehensive Plan and the 1980 Zoning Ordinance, no new driveways or intersections shall be permitted where street grades exceed 15 percent:

(2) No new street with a grade of 15 percent shall be permitted for a distance of more than 200 feet.

(3) In no case shall a new street grade exceed 15 percent.

(4) New street grades must be approved by the Lebanon Fire District, as per adopted Fire Code standards.

F. Reports Required

Where the buildable portion of the land to be developed exceeds 15 percent average slope, the following reports shall be required and their conclusions applied in order to prevent or mitigate possible hazards to life and property and adverse impacts on the natural environment, consistent with the purpose of this Steep Slope Development Overlay Zone (SSD-OZ).

1. Geotechnical Evaluations

a. This evaluation shall include data regarding the geology of the site, the nature, distribution, and strength of existing soils, conclusions and recommendations for grading procedures, design criteria for corrective measures, and options and recommendations to maintain soil and slope stability and minimize erosion of the site to be developed in a manner imposing the minimum variance from the natural conditions.

b. The investigation and report shall be prepared by a civil engineering geologist or a geotechnical engineer certified by the state of Oregon.

c. Geotechnical Report Standards: To be accepted, a Geotechnical Evaluation shall

(1) Be a stamped **Engineering Geologic Report** that meets or exceeds the standards for such investigations according to the Oregon State Board of Geologist Examiners and implementing the newest technology available (e.g., LIDAR data and "bare earth modeling"). The Oregon State Board of Geologic Examiners Guidelines for Preparing Engineering Geologic Reports in Oregon can be obtained from the Oregon State Board of Geologist Examiners' (see the Board's webpage). The latest edition shall be used.

(2) Include a comprehensive Engineering Geological/Geotechnical Engineering **investigation** and **report** for the site:

(a) The **investigation** must appropriately include field data of surface and subsurface earth from statistically representative appropriate sampling, such as bore holes, with special concern in identified potential land slide areas and areas of historic or proposed fill. It is expected that the **investigation** must also include an evaluation of seasonal hydrogeology.

(b) The **report** must include an evaluation of all data and recommend design criteria and standards for construction of each type of improvement proposed. In the professional practice of Engineering Geology and Geotechnical Engineering, it is expected that the **report** will evaluate the types and frequency of sampling, hydrogeologic effects on lands and improvements, erosion prevention/storm water management, and structural/geologic stability.

(3) Independent Review: If needed, as determined by the City, the applicant shall pay for an independent verification analysis and review of the applicant's investigation and report. Such an independent review shall be performed by a geotechnical expert (civil engineering geologist or a geotechnical engineer certified by the state of Oregon) selected by the City.

2. Grading Plan Report

This plan shall include the following information:

a. Existing and proposed details and contours (five-foot intervals) of property.

b. Details of terrain and area drainage.

c. Location of any existing buildings or structures on the property where the work is to be performed, the location of any existing buildings or structures on land of adjacent owners which are within 100 feet of the property or which may be affected by the proposed grading operations, and proposed or approximate locations of structures relative to adjacent topography.

d. The direction of drainage flow and the approximate grade of all streets with the final determination to be made in accordance with Section 16.11.040.F.5 of this Chapter.

e. Limiting dimensions, elevations, or finished contours to be achieved by the grading, including all cut and fill slopes, proposed drainage channels, and related construction.

f. Detailed plans and locations of all surface and subsurface drainage devices, walls, dams, sediment basins, storage reservoirs, and other protective devices to be constructed with, or as a part of, the proposed work, together with a map showing drainage areas, the complete drainage network, including outfall lines and natural drainageways which may be affected by the proposed development, and the estimated run-off of the area served by the drains.

g. A schedule showing when each stage of the project will be completed, including the total area of soil surface which is to be disturbed during each stage, and estimated starting and completion dates; the schedule shall be drawn up to limit to the shortest possible period the time that soil is exposed and unprotected.

(1) In no event shall the existing "natural" vegetative ground cover be destroyed, removed, or disturbed more than 15 days prior to grading or construction of required improvements.

(2) Within 15 days of grading or other pre-development activity that removes or significantly disturbs ground cover vegetation, exposed soil shall either be built upon (e.g., covered with gravel, a slab foundation or other construction), landscaped (e.g., seeded or planted with ground cover) or otherwise protected.

h. The Grading Plan shall be prepared by a geotechnical expert (civil engineering geologist or a geotechnical engineer certified by the state of Oregon).

3. Tree Removal Plans and Tree Felling Permits

a. Tree removal on slopes equal to or greater than 15% for development (not including forestry) shall require the submittal of a Tree Removal Plan and require a Tree Felling Permit (an Administrative Review process).

b. A Tree Removal Plan and Tree Felling Permit is needed for each lot. All trees proposed to be removed on a lot may be included on the same Tree Removal Plan and Tree Felling Permit application, or the developer may chose to submit multiple applications for each lot.

c. Development shall be designed to preserve the maximum number of trees on a site, and shall be shown as part of the Tree Removal Plan.

d. The development shall follow the standards for fuel reduction if the development is located in Wildfire Lands (see Section 16.11.3.7 below), and documentation shall be shown as part of the Tree Removal Plan.

e. When justified by findings of fact, the review authority may approve the removal of trees for one or more of the following conditions:

(1) The tree(s) is (are) located within the building envelope.

(2) The tree(s) is (are) located within the wildfire defense plan envelope and compromises the efficacy of the fire defense plan (see Section 16.11.040.G below).

(3) The tree(s) is (are) located within a proposed street, driveway, or parking area.

(4) The tree(s) is (are) located within a water, sewer, or other public utility easement.

(5) The tree(s) is (are) determined by a certified arborist to be dead or diseased, or it constitutes an unacceptable hazard to life or property when evaluated by the standards in Section 16.11.040.G below.

(6) The tree(s) is (are) located within or adjacent to areas of cuts or fills that are deemed threatening to the life of the tree, as determined by a landscape professional.

f. **Forestry, Timber Growing and/or Harvesting:** Any commercial activity relating to the growing and harvesting of forest tree species (or timber) shall be governed by the application and review procedures specified in the Land Use Chapters (16.05 – 16.10). Forestry is considered an agricultural land use and is regulated as an "Other Land Use" (See Tables 16.05-6, 16.06-6, 16.07-6, 16.08-6, 16.09-6, and 16.10-6, and See Glossary.)

4. Vegetation and Development Plan Report

A proposed development plan shall be submitted, depicting building envelopes for each lot, including driveway approaches and all other associated impervious surface areas.

a. In accordance with the provisions of Chapter 16.15 of this Code, the applicant shall specify whether trees will be felled under **(1)** one Tree Felling Permit (a separate Administrative Review process), **(2)** as part of the subdivision construction process, or **(3)** by separate Tree Felling Permit (a separate Administrative Review process) for each individual lot prior to the issuance of a Building Permit.

b. The plan shall be based upon the findings of the required reports in this Section and the lot coverage standards of the applicable Land Use Zone. Building envelopes shall be specified in Covenants, Conditions, and Restrictions recorded with the Subdivision Plat.

5. Verification of Slope and Grade Percentages

Prior to acceptance of the Final Plat, all streets shall be cross-sectioned and their center-lines staked in the field, to determine the accuracy of preliminary slope and grade percentages. If there are significant differences between preliminary and final grade and slope determinations, (e.g., density or street gradients exceed the limits set forth in this Chapter) the Tentative Plan shall be modified to reflect the revised information and resubmitted.

G. Urban-Wildland Interface Fire Protection Requirements

Additional fire protection requirements may be required in hillside development areas that are considered vegetated areas subject to wildfires as determined by the Fire Marshal.

1. The developer in such areas shall specify in the recorded Covenants, Conditions and Restrictions that a wildfire defense plan for **each** lot, approved by the Fire Marshal, will be required prior to the issuance of a building permit.
2. All buildings located in or adjacent to vegetated areas subject to wildfires shall have a Class A or B roofing in accordance with the Oregon State Structural Specialty Code.
3. The Oregon Fire Code, as adopted by the Lebanon Fire District, references the International Urban-Wildland Interface Code as a useful guide for use by the Fire Code Official in the interface area. All development proposals shall **demonstrate compliance with the International Wildland-Urban Interface Code**.

H. Modification of Transportation Standards for Steep Slope Development

The review authority may modify without a variance the following transportation related standards as they apply to an entire steep slope development area, within the following prescribed limits:

1. The reduction of public right of way, pavement width, and/or requirements for the installation of sidewalks as specified in Chapter 16.13 of this Code, may be allowed if provisions are made to provide off-street parking in addition to that required in Chapter 16.14 (Off-Street Parking).
2. The Review Authority may require combinations of collective private driveways, shared parking areas and on-street parallel parking bays where topography, special traffic, building, grading, or other circumstances necessitate additional regulation to minimize land and soil disturbance and minimize impervious surface areas.
3. Other development standards may not be modified under the provisions of this Subsection.

16.11.050 SPECIAL TRANSPORTATION AREA OVERLAY ZONE (STA-OZ)

A. Purpose

The primary objective of managing State Highway facilities in a Special Transportation Area Overlay Zone (STA-OZ) is to provide access to community activities, businesses, and residences, as well as to accommodate pedestrian movement along the highway in a downtown central business district.

B. Designated Boundaries

The City of Lebanon's Special Transportation District Overlay Zone is primarily located in the core of the Downtown area, and focuses on portions of Highway 20. The STA boundaries established by the Oregon Transportation Commission (OTC) are as follows:

1. Tangent Drive between the railroad and 2nd Street
2. 2nd Street south of Morton,
3. Morton west of US-20,
4. Main Street (US-20) between Rose and Oak (but not US-20 between Morton and Rose),
5. Park Street between Rose and Oak.

C. Characteristics and Requirements of the STA-OZ

1. Existing Public Street Spacing and Development Pattern

An STA accommodates the existing public street system and compact development pattern. Specific access management conditions for the designated STA on Highway 20 include the following provisions:

a. **Minimum spacing for public road approaches** is either the current block spacing or the spacing parameters established in the Transportation Systems Plan (TSP) and implemented in the City's Land Use Ordinance(s) and Comprehensive Plan.

b. **Public road connections** are preferred over private driveways, and in the STA, driveways accessing the State Highway are discouraged. Proposals for new driveways accessing the State Highway with approval by ODOT.

c. **Minimum spacing** for driveways, where they are allowed and where land use patterns permit, is 175 feet or mid-block if the current block spacing is less than 350 feet.

2. Need for Local Access

The designation of an STA in the City of Lebanon recognizes that the need for local access outweighs the consideration of maintaining highway mobility, except on designated Freight Highways (U.S. 20 and 34) where accessibility and mobility needs are balanced.

16.11.060 LIMITED USE OVERLAY ZONE (LU-OZ)

A. Purpose

The Limited Use Overlay Zone may only be applied when a zoning map amendment is requested by an applicant. The purpose of the Limited Use Overlay Zone is to reduce the list of permitted uses in a land use zone to those that are suitable for a particular location. Land use zones permit a number of uses that may be considered compatible in terms of the type and intensity of activity on adjacent properties. However, on a particular property certain permitted uses may conflict with adjacent land uses. Rather than deny appropriate permitted uses because the proposed land use zone would permit an objectionable use, the Limited Use Overlay can be used to identify the appropriate uses and require a conditional use permit for other uses normally permitted in the zone. It is the intent that the maximum number of acceptable uses be permitted so that the use of the property is not unnecessarily limited.

B. Requirements

When the Limited Use Overlay Zone is applied, the uses permitted in the underlying land use zone shall be limited to those permitted uses specifically referenced in the ordinance adopting the Limited Use Overlay Zone. Until the Overlay Zone has been removed or amended, the only permitted uses in the zone shall be those specifically referenced in the adopting ordinance. Uses that would otherwise be permitted may only be allowed if a Conditional Use permit is approved.

C. Procedures

1. The Limited Use Overlay Zone is applied at the time the underlying zone is being changed (Zoning Map Amendment – see Chapter 16.27).

2. Notice of a Zoning map amendment shall include a statement that the Planning Commission may impose a LU-OZ as a condition of zone amendment.

D. Criteria

The ordinance adopting the overlay zone shall include findings showing that:

1. No zone has a list of permitted uses where all uses would be appropriate.

2. The proposed zone is the best suited to accommodate the desired uses.

3. It is necessary to limit the uses permitted in the proposed zone.

4. The maximum number of acceptable uses in the zone have been identified and will be permitted.

E. Adoption

The ordinance adopting the overlay zone shall by section reference, or by name, identify those permitted uses in the zone that will remain permitted uses. A permitted use description may be segmented to require a conditional use for distinct uses that may not be compatible.

F. Official Zoning Map

The official Zoning Map shall be amended to show an "-(LU-OZ)" suffix on any parcel where the Limited Use Overlay Zone has been applied.

G. Development Provisions

Development of property located within the LU-OZ shall comply with all applicable procedures or development requirements contained in this Development Code. Compliance with these provisions is not waived, altered or otherwise modified by the LU-OZ designation.

H. Recording of Limited Use Overlay Zone (LU-OZ)

Any ordinance adopting a Limited Use Overlay Zone designation shall be recorded in the deed and mortgage records of Linn County.

16.11.070 FLOOD PLAIN OVERLAY ZONE (FP-OZ)

A. Authority

The State of Oregon has in ORS 197.175 delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry.

B. Findings of Fact

1. The flood hazard areas in the City of Lebanon are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
2. These flood losses may be caused by the cumulative effect of obstructions in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

C. Purpose

It is the purpose of this ordinance to promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in flood hazard areas by provisions designed to:

1. Protect human life and health;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; minimize prolonged business interruptions;
4. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, and streets and bridges located in special flood hazard areas;
5. Help maintain a stable tax base by providing for the sound use and development of flood hazed areas so as to minimize blight areas caused by flooding;
6. Notify potential buyers that the property is in a special flood hazard area;
7. Notify those who occupy special flood hazard areas that they assume responsibility for their actions; and
8. Participate in and maintain eligibility for flood insurance and disaster relief.

D. Methods of Reducing Flood Losses

In order to accomplish its purpose, this title includes methods and provisions for:

1. Restricting or prohibiting development which is dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that development vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage; and

5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

E. Definitions

Unless specifically defined below, words or phrases used in this title shall be interpreted so as to give the meaning they have in common usage.

Appeal: A request for a review of the interpretation of any provision of this ordinance or a request for a variance.

Area of shallow flooding: A designated Zone AO, AH, AR/AO or AR/AH on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard: The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR. "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard".

Base flood: The flood having a one percent chance of being equaled or exceeded in any given year.

Base flood elevation (BFE): The elevation to which floodwater is anticipated to rise during the base flood.

Basement: Any area of the building having its floor subgrade (below ground level) on all sides.

Below-grade crawl space: Means an enclosed area below the base flood elevation in which the interior grade is not more than two feet 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 feet at any point.

Building: See "Structure."

Critical facility: Means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use, or store hazardous materials or hazardous waste.

Development: Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

Elevated building: Means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

Flood or Flooding:

(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:
    (1) The overflow of inland or tidal waters.
    (2) The unusual and rapid accumulation or runoff of surface waters from any source.
    (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical

levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

Flood elevation study: An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

Flood Insurance Rate Map (FIRM): The official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Insurance Study (FIS): See "Flood elevation study".

Flood proofing: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.

Floodplain or flood prone area: Any land area susceptible to being inundated by water from any source. See "Flood or flooding."

Floodplain administrator: The community official designated by title to administer and enforce the floodplain management regulations.

Floodplain management: The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

Floodplain management regulations: Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other application of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as "Regulatory Floodway."

Functionally dependent use: A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.

Hazardous material: The Oregon Department of Environmental Quality defines hazardous materials to include any of the following:

(a) Hazardous waste as defined in ORS 466.005;
(b) Radioactive waste as defined in ORS 469.300, radioactive material identified by the Energy Facility Siting Council under ORS 469.605 and radioactive substances defined in ORS 453.005
(c) Communicable disease agents as regulated by the Health Division under ORS Chapter 431 and 433.010 to 433.045 and 433.106 to 433.990;
(d) Hazardous substances designated by the United States Environmental Protection Agency (EPA) under section 311 of the Federal Water Pollution Control Act, P.L. 92-500, as amended;

(e) Substances listed by the United States EPA in section 40 of the Code of Federal Regulations, Part 302 – Table 302.4 (list of Hazardous Substances and Reportable Quantities) and amendments;
(f) Material regulated as a Chemical Agent under ORS 465.550;
(g) Material used as a weapon of mass destruction, or biological weapon;
(h) Pesticide residue;
(i) Dry cleaning solvent as defined by ORS 465.200(9).

Highest adjacent grade: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure: Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
    a. By an approved state program as determined by the Secretary of the Interior or
    b. Directly by the Secretary of the Interior in states without approved programs.

Letter of Map Change (LOMC): Means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. The following are categories of LOMCs:

(a) **Conditional Letter of Map Amendment (CLOMA):** A CLOMA is FEMA's comment on a proposed structure or group of structures that would, upon construction, be located on existing natural ground above the base (1-percent-cannual-chane) flood elevation on a portion of a legally defined parcel of land that is partially inundated by the base flood.
(b) **Conditional Letter of Map Revision (CLOMR):** A CLOMR is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the special flood hazard area.
(c) **Conditional Letter of Map Revision based on Fill (CLOMR-F):** A CLOMR-F is FEMA's comment on a proposed project that would, upon construction, result in a modification of the special flood hazard area through the placement of fill outside the existing regulatory floodway.
(d) **Letter of Map Amendment (LOMA):** An official amendment, by letter, to the Flood Insurance Rate Maps (FIRMs) based on technical data showing that an existing structure, parcel of land or portion of a parcel of land that is naturally high ground, (i.e., has not been elevated by fill) above the base flood, that was inadvertently included in the special flood hazard area.
(e) **Letter of Map Revision (LOMR):** A LOMR is FEMA's modification to an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective base flood elevations, or the SFHA. The LMOR officially revises the FIRM or FBFM, and sometimes the Flood

Insurance Study (FIS) report, and, when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.

(f) **Letter of Map Revision based on Fill (LOMR-F):** A LOMR-F is FEMA's modification of the special flood hazard area shown on the Flood Insurance Rate Map (FIRM) based on the placement of fill outside the existing regulatory floodway.

(g) **PMR:** A PMR is FEMA's physical revision and republication of an effective Flood Insurance Rate Map (FIRM) or Flood Insurance Study (FIS) report. PMRs are generally based on physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective baes flood elevations, or the special flood hazard area.

Lowest floor: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

Manufactured dwelling: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not include a "recreational vehicle" and is synonymous with "manufactured home".

Manufactured dwelling park or subdivision: A parcel (or contiguous parcels) of land divided into two or more manufactured dwelling lots for rent or sale.

Mean sea level: For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

New construction: For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by the City of Lebanon and includes any subsequent improvements to such structures.

Recreational vehicle: A vehicle which is:

1. Built on a single chassis;
2. 400 square feet or less 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.

Regulatory floodway: See "Floodway".

Sheet flow area: See "Area of shallow flooding".

Special flood hazard area: See "Area of special flood hazard" for this definition.

Start of construction: Includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. 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 dwelling 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 that alteration affects the external dimensions of the building.

Structure: For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured dwelling.

Substantial damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Variance: A grant of relief by the City of Lebanon from the terms of a flood plain management regulation.

Violation: The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Water dependent: Means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of intrinsic nature of its operations.

Water surface elevation: The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, or other datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

F. Applicability

This title shall apply to all special flood hazard areas within the jurisdiction of the City of Lebanon.

G. Basis for Establishing the Special Flood Hazard Areas

The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Linn County, Oregon and Incorporated Areas," dated July 31, 2019, with accompanying Flood Insurance Rate Maps (FIRMs): 41043CIND0B, 41043C0565G, 41043C0566G, 41043C0567G, 41043C0568G, 41043C0569G, 41043C0588G, and 41043C0590G are hereby adopted by reference and declared to be a part of this ordinance. The FIS and FIRM panels are on file at Lebanon City Hall.

H. Coordination with State of Oregon Specialty Codes

Pursuant to the requirement established in ORS 455 that the City of Lebanon administers and enforces the State of Oregon Specialty Codes, the City of Lebanon does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas.

Therefore, this ordinance is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.

I. Compliance and Penalties for Noncompliance

1. Compliance. All development within special flood hazard areas is subject to the terms of this ordinance and required to comply with its provisions and all other applicable regulations.
2. Penalties for Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a violation. Any person who violates or fails to comply with the requirements of this title shall be subject to a fine, and in addition shall pay all costs and expenses incurred by the City in the case. Each day that a violation is permitted to exist constitutes a separate violation. Nothing contained in this Section shall prevent the City from taking such lawful action as is necessary to prevent or remedy any violation.

J. Abrogation and Severability

1. Abrogation. This title is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
2. Severability. This title and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this title.

K. Interpretation

In the interpretation and application of this title, all provisions shall be:

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.

L. Warning and Disclaimer of Liability

1. **Warning.** The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages.
2. **Disclaimer of Liability**. This title shall not create liability on the part of the City of Lebanon, any officer or employee thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

M. Administration

1. **Designation of the Floodplain Administrator.** The Community Development Director and their designee are hereby appointed to administer, implement, and enforce this title by granting or denying development permits in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions.
2. **Duties and Responsibilities of Administrator.** Duties of the floodplain administrator, or their designee, shall include, but not be limited to those duties set forth in Sections 16.11.070.M.1 through 16.11.070.M.5.
3. **Permit Review.** The Floodplain Administrator shall review all development permits to determine that:
    a. The permit requirements of this title have been satisfied;
    b. All other required local, state, and federal permits have been obtained and approved;
    c. Review all development permits to determine if the proposed development is located in a floodway. If located in the floodway assure that the floodway provisions of this title in Section 16.11.070.V.4 are met;
    d. Review all development permits to determine if the proposed development is located in an area where Base Flood Elevation (BFE) data is available either through the Flood Insurance Study (FIS) or from another authoritative source. If BFE data is not available then ensure compliance with the provisions of section 16.11.070.T;
    e. Provide to building officials the Base Flood Elevation (BFE) applicable to any building requiring a development permit;
    f. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement as defined in section 16.11.070.E;
    g. Review all development permits to determine if the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the provisions in section 16.11.070.P.1; and
    h. Review all development permits to determine if the proposed development activity includes the placement of fill or excavation.
4. **Information to be Obtained and Maintained.** The following information shall be obtained and maintained and shall be made available for public inspection as needed:
    a. Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with section 16.11.070.T;
    b. Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of sections 16.11.070.V.4, and 16.11.070.M.3.b are adhered to;
    c. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement);
    d. Where base flood elevation data are utilized, obtain As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement)

prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection;

e. Maintain all Elevation Certificates (EC) submitted to the City of Lebanon;
f. Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this ordinance and where Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with section 16.11.070.T;
g. Maintain all floodproofing certificates required under this title;
h. Record and maintain all variance actions, including justification for their issuance;
i. Obtain and maintain all hydrologic and hydraulic analyses performed as required under section 16.11.070.V.4;
j. Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations as required under section 16.11.070.M.5.d;
k. Maintain for public inspection all records pertaining to the provisions of this title.

5. **Requirement to Notify Other Entities and Submit New Technical Data.**
   a. **Community Boundary Alterations**. The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.
   b. **Watercourse Alterations.** Notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:
      i. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or
      ii. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

      The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under section 16.11.070.M.5.c. Ensure compliance with all applicable requirements in sections 16.11.070.M.5.c and 16.11.070.P.1.

   c. **Requirement to Submit New Technical Data.** A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Section 44 of the Code of Federal Regulations (CFR), Sub-Section 65.3. The community may require the applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change (LOMC) process.

The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:

i. Proposed floodway encroachments that increase the base flood elevation; and
ii. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

An applicant shall Notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

The applicant shall be responsible for preparing all technical data to support CLOMR/LOMR applications and paying any processing or application fees associated with the CLOMR/LOMR.

The Floodplain Administrator shall be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application, until the applicant demonstrates that the project will or has met the requirements of this code and all applicable state and federal permits.

d. **Substantial Improvement and Substantial Damage Assessments and Determinations.** Conduct Substantial Improvement (SI) (as defined in section 16.11.070.E) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files in accordance with section 16.11.070.M.4. Conduct Substantial Damage (SD) (as defined in section 16.11.070.E) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area (as established in section 16.11.070.G) are damaged to the extent that the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

N. Establishment of Development Permit

1. **Floodplain Development Permit Required.** A development permit shall be obtained before construction or development begins within any area horizontally within the special flood hazard area established in section 16.11.070.G. The development permit shall be required for all structures, including manufactured dwellings, and for all other development, as defined in section 16.11.070.E, including fill and other development activities.
2. **Application for a Permit**. Application for a development permit may be made on forms furnished by the Floodplain Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically the following information is required:
    a. In riverine flood zones, the proposed elevation (in relation to mean sea level), of the lowest floor (including basement) and all attendant utilities of all new and

substantially improved structures; in accordance with the requirements of section 16.11.070.M.4;

b. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed;
c. Certification by a registered professional engineer or architect licensed in the State of Oregon that the floodproofing methods proposed for any non-residential structure meet the floodproofing criteria for non-residential structures in section 16.11.070.V.3.c;
d. Description of the extent to which any watercourse will be altered or relocated;
e. Base Flood Elevation data for subdivision proposals or other development when required per sections 16.11.070.M.3 and 16.11.070.S;
f. Substantial improvement calculation for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure; and
g. The amount and location of any fill or excavation activities proposed.

O. Variance Procedure

The issuance of a variance is for floodplain management purposes only. Flood insurance premium rates are determined by federal statute according to actuarial risk and will not be modified by the granting of a variance

1. Conditions for Variances.

    a. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the provisions of sections 16.11.070.O.1.c, e, and 16.11.070.O.2. As the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases.
    b. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
    c. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.
    d. Variances shall only be issued upon:
        i. A showing of good and sufficient cause;
        ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
        iii. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing laws or ordinances.
    e. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of section 4.4.1 (B) – (D) are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

2. Variance Notification. Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance and that

such construction below the base flood elevation increases risks to life and property. Such notification and a record of all variance actions, including justification for their issuance shall be maintained in accordance with section 16.11.070.M.4.

P. Provisions for Flood Hazard Reduction

In all special hazard areas, the following standards shall be adhered to:

1. **Alteration of Watercourses.** Require that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained. Require that maintenance is provided within the altered or relocated portion of said watercourse to ensure that the flood carrying capacity is not diminished. Require compliance with sections 16.11.070.M.5.b, c.
2. **Anchoring.**
    a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
    b. All manufactured dwellings shall be anchored per section 16.11.070.V.3.d.
3. **Construction Materials and Methods.**
    a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
    b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

Q. Utilities and Equipment

1. Water Supply, Sanitary Sewer, and On-Site Waste Disposal Systems.
    a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
    b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
    c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.
2. Electrical, Mechanical, Plumbing and Other Equipment. Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated at or above the base flood level or shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall, if replaced as part of a substantial improvement, meet all the requirements of this section.

R. Tanks

1. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.
2. Above-ground tanks shall be installed at or above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

S. Subdivision Proposals & Other Proposed Developments

1. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, shall include within such proposals, Base Flood Elevation data.
2. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) shall:
   a. Be consistent with the need to minimize flood damage.
   b. Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.
   c. Have adequate drainage provided to reduce exposure to flood hazards.

T. Use of Other Base Flood Data

When Base Flood Elevation data has not been provided in accordance with section 16.11.070.G the local floodplain administrator shall obtain, review, and reasonably utilize any Base Flood Elevation data available from a federal, state, or other source, in order to administer section 16.11.070.P. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements of section 16.11.070.S.

Base Flood Elevations shall be determined for development proposals that are five acres or more in size or are 50 lots of more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding, the test of reasonableness includes use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

U. Structures Located in Multiple or Partial Flood Zones.

In coordination with the State of Oregon Specialty Codes:

1. When a structure is located in multiple flood zones on the community's Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply.

When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

V. Specific Standards for Riverine Flood Zones

These specific standards shall apply to all new construction and substantial improvements in addition to the General Standards contained in Section 16.11.070.P of this title.

1. **Flood Openings.** All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the Base Flood Elevation, including crawl spaces shall:
   a. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters;
   b. Be used solely for parking, storage, or building access;
   c. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:

i. A minimum of two openings;
ii. The total net area of non-engineered openings shall be not less than one (1) square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosure walls;
iii. The bottom of all openings shall be no higher than one foot above grade;
iv. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area; and
v. All additional higher standards for flood openings in the State of Oregon Residential Specialty Codes Section R322.2.2 shall be complied with when applicable.

2. **Garages**.
   a. Attached garages may be constructed with the garage floor slab below the Base Flood Elevation (BFE) in riverine flood zones, if the following requirements are met:
      i. If located within a floodway the proposed garage must comply with the requirements of section 16.11.070.V.4;
      ii. The floors are at or above grade on not less than one side;
      iii. The garage is used solely for parking, building access, and/or storage;
      iv. The garage is constructed with flood openings in compliance with section 16.11.070.V.1 to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.
      v. The portions of the garage constructed below the BFE are constructed with materials resistant to flood damage;
      vi. The garage is constructed in compliance with the standards in section 16.11.070.P; and
      vii. The garage is constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
   b. Detached garages must be constructed in compliance with the standards for appurtenant structures in section 16.11.070.V.3.f or non-residential structures in section 16.11.070.V.3.c depending on the square footage of the garage.
3. **For Riverine Special Flood Hazard Areas with Base Flood Elevations.** In addition to the general standards listed in section 16.11.070.P the following specific standards shall apply in Riverine (non-coastal) special flood hazard areas with Base Flood Elevations (BFE): Zones A1-A30, AH, and AE.
   a. **Before Regulatory Floodway.** In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's Flood Insurance Rate Map (FIRM), unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not

increase the water surface elevation of the base flood more than one foot at any point within the community.

b. **Residential Construction.**
   i. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at or above the Base Flood Elevation (BFE).
   ii. Enclosed areas below the lowest floor shall comply with the flood opening requirements in section 16.11.070.V.1.

c. **Non-residential Construction.**
   i. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall:
      1. Have the lowest floor, including basement elevated at or above the Base Flood Elevation (BFE); or, together with attendant utility and sanitary facilities;
      2. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
      3. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
      4. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this section based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Floodplain Administrator as set forth section 16.11.070.M.4.
   ii. Non-residential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor in section 16.11.070.V.1.
   iii. Applicants floodproofing non-residential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g. a building floodproofed to the base flood level will be rated as one (1) foot below.

d. **Manufactured Dwellings.**
   i. New or substantially improved manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with section 16.070.V.1;
   ii. The bottom of the longitudinal chassis frame beam shall be at or above Base Flood Elevation;
   iii. New or substantially improved manufactured dwellings shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques), and;
   iv. Electrical crossover connections shall be a minimum of twelve (12) inches above Base Flood Elevation (BFE).

e. **Recreational Vehicles.** Recreational vehicles placed on sites are required to:
   i. Be on the site for fewer than 180 consecutive days,
   ii. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
   iii. Meet the requirements of section 16.11.070.V.3.d, including the anchoring and elevation requirements for manufactured dwellings.

f. **Appurtenant (Accessory) Structures.** Relief from elevation or floodproofing requirements for residential and non-residential structures in Riverine (Non-Coastal) flood zones may be granted for appurtenant structures that meet the following requirements:
   i. Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway found in section 16.11.070.V.4.
   ii. Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;
   iii. In compliance with State of Oregon Specialty Codes, appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet.
   iv. The portions of the appurtenant structure located below the Base Flood Elevation must be built using flood resistant materials;
   v. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.
   vi. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in section 16.11.070.V.1;
   vii. Appurtenant structures shall be located and constructed to have low damage potential;
   viii. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed incompliance with section 16.11.070.R;
   ix. Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

g. ***Below Grade Crawl Spaces.***
   i. The building must 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 flood openings stated in section 16.11.070.V.1. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.

ii. The crawlspace is an enclosed area below the Base Flood Elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.

iii. Portions of the building below the 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.

iv. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.

v. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.

vi. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.

vii. There must be an adequate drainage system that removes floodwaters 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.

viii. The velocity of floodwaters at the site shall not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

4. **Floodways.** Located within the special flood hazard areas established in section 16.11.070.G are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

a. Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless:
    i. Certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses, performed in accordance with standard engineering practices and FEMA Region X engineering guidance, that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge; Or
    ii. A community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that a Conditional Letter of Map Revision (CLOMR) is applied for and approved by the Federal Insurance Administrator, and the requirements for such revision as established under Volume 44 of the Code of Federal Regulations, section 65.12 are fulfilled.
b. If the requirements of section 16.11.070.V.4.a are satisfied, all new construction, substantial improvements, and other development shall comply with all other applicable flood hazard reduction provisions of section 16.11.070.P.

5. **Standards for Shallow Flooding Areas.** Shallow flooding areas appear on FIRMs as AO zones with depth designations or as AH zones with Base Flood Elevations. For AO zones the base flood depths range from one (1) to three (3) feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. For both AO and AH zones, adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.
    a. **Standards for AH zones.** Development within AH Zones must comply with the standards in sections 16.11.070.P, V, and V.5.
    b. **Standards for AO zones**. In AO zones, the following provisions apply in addition to the requirements in sections 16.11.070.P, and 16.11.070.V.5:
        i. New construction and substantial improvement of residential structures and manufactured dwellings within AO zones shall have the lowest floor, including basement, elevated above the highest grade adjacent to the building, at minimum to or above the depth number specified on the Flood Insurance Rate Maps (FIRM) (at least two (2) feet if no depth number is specified). For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam.
        ii. New construction and substantial improvements of non-residential structures within AO zones shall either:
            1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, at minimum to or above the depth number specified on the Flood Insurance Rate Maps (FIRMS) (at least two (2) feet if no depth number is specified); or

2. Together with attendant utility and sanitary facilities, be completely floodproofed to or above the depth number specified on the FIRM or a minimum of two (2) feet above the highest adjacent grade if no depth number is specified, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as stated in section 16.11.070.V.3.c.i.4.

iii. Recreational vehicles placed on sites within AO Zones on the community's Flood Insurance Rate Maps (FIRM) shall either:
   1. Be on the site for fewer than 180 consecutive days, and
   2. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
   3. Meet the elevation requirements of section 16.11.070.V.5.b, and the anchoring and other requirements for manufactured dwellings of section 16.11.070.V.3.d.

iv. In AO zones, new and substantially improved appurtenant structures must comply with the standards in section 16.11.070.V.3.f.

v. In AO zones, enclosed areas beneath elevated structures shall comply with the requirements in section 16.11.070.V.1.

16.11.080 BIOSCIENCE AND TECHNOLOGY OVERLAY ZONE (BST-OZ)

A. Purpose

The establishment of the Western University of Health Sciences adjacent to the Lebanon Community Hospital created an opportunity to foster research, development, and manufacturing in the field of biological sciences. The purpose of the Bioscience and Technology Overlay Zone (BST-OZ) is to provide necessary land use guidelines, not only for site development, but also as a means to encourage the location of bioscience firms within the community.

B. Location of Overlay Zone

The Bioscience and Technology Overlay Zone shall include the following properties, as well as other properties that may be included through future amendments to the Overlay Zone:

1. With the exception of the Pioneer School, all Mixed Use (Z-MU) zoned property located south of Reeves Parkway, west of North Santiam Highway and situated north of Mary Street.
2. Mixed Use zoned land located north of Reeves Parkway and west of 5th Street.
3. Lebanon Community Hospital campus, including Hospital property located adjacent to Industrial Way.
4. A parcel of land directly south of Mullins Drive/Twin Oaks Drive, east of 2nd Street and west of North Santiam Highway/North Main Street.
5. Industrial-zoned land located at the south-east intersection of Reeves Parkway and Hansard Street.

C. Permitted Uses

The intent of the Overlay Zone is to focus on scientific research and technological applications related to the biological sciences. Recognizing the constantly evolving nature of this field, uses are not specifically defined, but intended to include those technological applications that use biological systems, living organisms, or derivatives thereof, to make or modify products or processes for a specific use. Therefore, examples of uses permitted in the zone include, but are not limited to, the following:

1. Medical, biological and related engineering research
2. Medical education, such as colleges, universities and similar training and research facilities
3. Development and production of medical devices
4. Medical diagnostics
5. Therapeutics
6. Pharmaceuticals
7. Bio-agricultural products
8. Medical software
9. Related engineering and technology activities
10. Research services, including labs and associated staff in support of bioscience activities
11. Other scientific and technological activities of a similar nature

D. Development of Land

As an overlay zone, the BST-OZ provides a landowner additional development opportunities *but does not require* a landowner establish uses unique to the BST-OZ. Depending on whether or not a master plan governs a property, available development options include the following:

1. Master Plan – Property within an approved master plan may continue to develop consistent with the approved plan, including any subsequent approved modifications to the plan.

2. Underlying Zoning – Property located outside of an approved master plan may continue to develop with uses identified in the underlying zone. For example, residential development may occur on property zoned Residential Mixed Density (Z-RM).

3. Overlay Zone – *All property* within the BST-OZ may develop for uses identified in Section 16.11.080.C, subject to the following provisions:

   a. Establishment of a use identified in Section 16.11.080.C, shall be subject to a Ministerial Review.
   b. Development requirements shall conform to the applicable provisions within the Industrial (Z-IND) zone (Chapter 16.09).
   c. The maximum building height is 50-feet.
   d. For property located within an approved master plan, the improvements shall not be altered or modified in a manner that the Community Development Manager finds would negatively affect the street plan and pedestrian access. Revisions to approved street or pedestrian access plans shall require a modification to the adopted master plan.
   e. Approval of a Ministerial Review shall not exempt a development from compliance with underlying deed restrictions or covenants.