

**VOL: CJ2001    PAGE: 57**  
**RECORDED DOCUMENT**

STATE OF OREGON  
COUNTY OF DESCHUTES



\*CJ2001-57 \* Vol-Page

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**DO NOT REMOVE THIS CERTIFICATE**

(This certificate constitutes a part of the original instrument in accordance with ORS 205.180(2). Removal of this certificate may invalidate this certificate and affect the admissibility of the original instrument into evidence in any legal proceeding.)

I hereby certify that the attached instrument was received and duly recorded in Deschutes County records:

DATE AND TIME:        Feb. 2, 2001; 8:00 a.m.

DOCUMENT TYPE:       Ordinance (CJ)

NUMBER OF PAGES: 24

A handwritten signature in cursive script that reads "Mary Sue Penhollow".

MARY SUE PENHOLLOW  
DESCHUTES COUNTY CLERK

KEY PUNCHED  
FEB 12 2001

CJ 2001-57

REVIEWED  
COUNSEL

BEFORE THE BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON

An Ordinance Amending Chapter 18.80 of Title 18,  
the Deschutes County Zoning Ordinance. \*

RECEIVED

FEB 02 2001

ORDINANCE NO. 2001-001

DESCHUTES  
COUNTY CLERK

8:00 AM

WHEREAS, the Board of County Commissioners has proceeded to comply with Periodic Review Work Program Modification (Order No. 001246).

WHEREAS, the revision of Chapter 18.80, Airport Height Combining Zone, of Title 18, Deschutes County Zoning Ordinance, was required as part of Periodic Review; and

WHEREAS, after notice and hearing as required by law, the Board of County Commissioners has considered the recommendation of the County Planning Commission; now, therefore

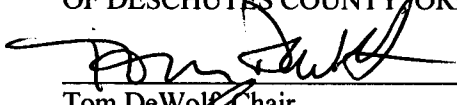
THE BOARD OF COUNTY COMMISSIONERS OF DESCHUTES COUNTY, OREGON,  
ORDAINS as follows:

Section 1. REPEAL AND REPLACE. The Airport Height Combining Zone, attached hereto as Exhibit "A" and incorporated herein by this reference, in Chapter 18.80 of the Deschutes County Zoning Ordinance, is repealed in its entirety and replaced with a new Chapter 18.80, Airport Safety Combining Zone, to read as set forth in Exhibit "B," attached hereto and incorporated herein by this reference.

Section 2. FINDINGS. The Board adopts the Community Development Department staff report for the Airport Safety Combining Zone, attached to Ordinance 2001-002 as Exhibit "B" and incorporated herein by this reference, as its findings to support this Ordinance.

DATED this 22nd day of Jan, 2001.

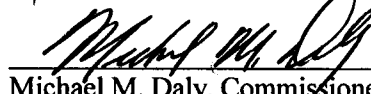
BOARD OF COUNTY COMMISSIONERS  
OF DESCHUTES COUNTY, OREGON



Tom DeWolf, Chair




Dennis R. Luke, Commissioner



Michael M. Daly, Commissioner

ATTEST:

  
Recording Secretary

**Chapter 18.80. AIRPORT HEIGHT  
COMBINING A-H ZONE**

~~18.80.010. Purpose.~~

~~18.80.020. Application of provisions.~~

~~18.80.030. Uses permitted outright.~~

~~18.80.040. Uses permitted conditionally.~~

~~18.80.050. Use limitations.~~

~~18.80.060. Dimensional standards.~~

~~18.80.010. Purpose.~~

~~The purpose of the Airport Height Combining Zone is to restrict the height of trees, buildings, structures, or other items which might intrude into areas used by aircraft.~~

~~(Ord. 91-020 § 1, 1991)~~

~~18.80.020. Application of provisions.~~

~~The provisions of this section shall apply to all areas under airport approach surfaces, transitional surfaces, horizontal surfaces and conical surfaces.~~

~~(Ord. 91-020 § 1, 1991)~~

~~18.80.030. Uses permitted outright.~~

~~Uses permitted shall be those identified in the underlying zone with which the A-H Zone is combined.~~

~~(Ord. 91-020 § 1991)~~

~~18.80.040. Uses permitted conditionally.~~

~~Uses permitted conditionally shall be those identified as conditional uses in the underlying zone with which the A-H Zone is combined, and shall be subject to all conditions of the underlying zone as well as the conditions of the A-H Zone.~~

~~(Ord. 91-020 § 1, 1991)~~

~~18.80.050. Use limitations.~~

~~No use in an A-H Zone shall be allowed that could reasonably be expected to endanger the safety of persons in aircraft passing over the land or persons and property on the ground. Reasonable conditions to protect the public safety may be imposed by the Planning Director or Hearings Body.~~

~~(Ord. 91-020 § 1, 1991)~~

~~18.80.060. Dimensional standards.~~

~~A. Minimum lot size and setbacks shall be those indicated in the underlying zone with which the A-H Zone is combined.~~

~~B. Height Limitations. No structure or plant growth shall exceed 35 feet in height in any of the following zones:~~

~~1. Utility Runway Visual Approach Zone.~~

~~Slopes 20 feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 5,000 feet along the extended runway centerline.~~

~~2. Runway Larger Than Utility With a~~

~~Visibility Minimum Greater Than Three Fourths Mile Nonprecision Instrument Approach Zone. Slopes 34 feet outward for each foot upward beginning at the end of and at the same elevation as the primary surface and extending to a horizontal distance of 10,000 feet along the extended runway centerline.~~

~~3. Transitional Zones. Slopes seven feet~~

~~outward for each foot upward beginning at the side of and at the same elevation as the primary surface and approach surface, and extending to a height of 150 feet above the airport elevation which is 3,452 feet above mean sea level. In addition to the foregoing, there are established height limits sloping seven feet outward for each foot upward beginning at the sides of and at the same elevation as the approach surface, and extending to where they intersect the conical surface.~~

~~4. Horizontal Zone. Established at 150 feet~~

~~above the airport elevation or at a height of 3,602 feet above mean sea level.~~

~~5. Conical Zone. Slopes 20 feet outward~~

~~for each foot upward beginning at the periphery of the horizontal zone and at 150 feet above the airport elevation and extending to a height of 350 feet above the airport elevation.~~

~~6. Where an area is covered by more than one height limitation, the more restrictive shall prevail.~~

~~7. The airport owners, or their agents, shall be permitted at mutually agreed upon times to enter onto private property to reduce the height of trees which exceed the height limitations herein established.~~

(Ord. 91-020 § 1, 1991)

**Chapter 18.80 AIRPORT SAFETY  
(AS) COMBINING  
ZONE**

- 18.80.010 Purpose**
- 18.80.020 Application of Provisions**
- 18.80.022 Definitions**
- 18.80.024 Imaginary Surfaces and  
Noise Impact Boundaries**
- 18.80.026 Notice of Land Use and  
Permit Applications**
- 18.80.028 Height Limitations**
- 18.80.030 Redmond Municipal Airport**
- 18.80.032 Bend Municipal Airport**
- 18.80.034 Sunriver Airport**
- 18.80.036 Sisters Eagle Air Airport**
- 18.80.038 Cline Falls Airpark**
- 18.80.040 Juniper Airpark**
- 18.80.044 Land Use Compatibility**
- 18.80.050 Uses Permitted Outright**
- 18.80.054 Conditional Uses**
- 18.80.056 Additional Requirements**
- 18.80.058 Non-Conforming Uses.**
- 18.80.060 Variances**
- 18.80.062 Dimensional Standards**
- 18.80.064 Procedures**
- 18.80.072 Water Impoundments**
- 18.80.074 Wetland Mitigation,  
Creation, Enhancement and  
Restoration**
- 18.80.076 Water Impoundment  
Notification**
- 18.80.078 FAA Notification (Form  
7460-1)**

In any zone that is overlain by an Airport Safety Combining Zone (AS Zone), the requirements and standards of this section shall apply in addition to those specified in the ordinance for the underlying zone. If a conflict in regulations or standards occurs, the more restrictive provisions shall govern.

**18.80.010 Purpose.**

The purpose of the AS Zone is to restrict incompatible land uses and airspace obstructions around airports in an effort to maintain an airport's maximum benefit. The imaginary surfaces and zones; boundaries and their use limitations comprise the AS Zone. Any uses permitted outright or by conditional use in the underlying zone are

allowed except as provided for in 18.80.044, 050, 054, 056 and 058. The protection of each airport's imaginary surfaces will be accomplished through the use of those land use controls deemed necessary to protect the community it serves. Incompatible uses may include the height of trees, buildings, structures or other items and uses that would be subject to frequent aircraft overflight or might intrude into areas used by aircraft.

**18.80.020 Application of Provisions.**

The provisions of this section shall only apply to unincorporated areas located under airport imaginary surfaces and zones, including approach surfaces, transitional surfaces, horizontal surfaces, conical surfaces and runway protection zones. While this Chapter identifies dimensions for the entire imaginary surface and zone, parts of the surfaces and/or zones do not apply within the Redmond, Bend or Sisters Urban Growth Boundaries. The Redmond Airport is owned and operated by the City of Redmond, and located wholly within the Redmond City Limits.

Imaginary surface dimensions vary for each airport covered by this section. Based on the classification of each individual airport, only those portions (of the AS Zone) that overlay existing County zones are relevant.

Public use airports covered by this section include Redmond Municipal, Bend Municipal, Sunriver and Sisters Eagle Air. Although it is a public-use airport, due to its size and other factors, the County treats land uses surrounding the Sisters Eagle Air airport based on the ORS 836.608 requirements for private-use airports. The Oregon Department of Aviation is still studying what land use requirements will ultimately be applied to Sisters. However, contrary to the requirements of ORS 836.608, as will all public use airports, federal law requires that the FAA Part 77 surfaces must be applied. The private use airports covered by this section include Cline Falls Airpark and Juniper Airpark.

**18.80.022 Definitions**

1. Aircraft. Helicopters and airplanes, but not hot air balloons or ultralights. (Balloons are governed by FAR Part 30, and ultralights by FAR Part 103. Ultralights are basically unregulated by the FAA.)

2. Airport. The strip of land used for taking off and landing aircraft, together with all adjacent land used in connection with the aircraft landing or taking off from the strip of land, including but not limited to land used for existing airport uses.

3. Airport Direct Impact Area. The area located within 5,000 feet of an airport runway, excluding lands within the runway protection zone and approach surface. (Redmond, Bend, and Sunriver)

4. Airport Elevation. The highest point of an airport's usable runway, measured in feet above mean sea level.

5. Airport Imaginary Surfaces (and zones). Imaginary areas in space and on the ground that are established in relation to the airport and its runways.

For the Redmond, Bend, Sunriver and Sisters airports, the imaginary surfaces are defined by the primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface.

For the Cline Falls and Juniper airports, the imaginary areas are only defined by the primary surface and approach surface.

6. Airport Noise Criterion. The State criterion for airport noise is an Average Day-Night Sound Level (DNL) of 55 decibels (dBA). The Airport Noise Criterion is not designed to be a standard for imposing liability or any other legal obligation except as specifically designated pursuant to OAR 340, Division 35.

7. Airport Noise Impact Boundary. Areas located within 1,500 feet of an airport runway or within established noise contour boundaries exceeding 55 Ldn.

8. Airport Safety Combining Zone (AS Zone). A Deschutes County zone intended to place additional land use conditions on land impacted by the airport while retaining

the existing underlying zone. The airport imaginary surfaces, impact areas, boundaries and their use limitations comprise the AS Zone. The AS Zone may apply to either public-use or private-use airports.

9. Airport Secondary Impact Area. The area located between 5,000 and 10,000 feet from an airport runway. (Redmond, Bend, and Sunriver)

10. Airport Sponsor. The owner, manager, or other person or entity designated to represent the interests of an airport.

11. Airport Uses. Those uses described in OAR 660-013-0100 and 660-013-0110.

12. Approach Surface. A surface longitudinally centered on the extended runway centerline and extending outward and upward from each end of the primary surface.

For Redmond, Bend, Sunriver, and Sisters airports:

(A) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of:

(1) 1,250 feet for a utility runway having a visual approach;

(2) 1,500 feet for other than a utility runway having a visual approach;

(3) 2,000 feet for a utility runway having a non-precision instrument approach;

(4) 3,500 feet for a non-precision instrument runway, other than utility, having visibility minimums greater than three-fourths statute mile;

(5) 4,000 feet for a non-precision instrument runway, other than utility, having visibility minimums at or below three-fourths statute mile; and

(6) 16,000 feet for precision instrument runways.

(B) The approach surface extends for a horizontal distance of

(1) 5,000 feet at a slope of 20 feet outward for each foot upward for all utility runways;

(2) 10,000 feet at a slope of 34 feet outward for each foot upward for all non-precision instrument runways, other than utility; and

(3) 10,000 feet at a slope of 50 feet outward for each one foot upward, with an additional 40,000 feet at slope of 40 feet outward for each one foot upward, for precision instrument runways.

(C) The outer width of an approach surface will be that width prescribed in this subsection for the most precise approach existing or planned for that runway end.

For the Cline Falls and Juniper airports:

(D) The inner edge of the approach surface is the same width as the primary surface and it expands uniformly to a width of 450 feet for that end of a private use airport with only visual approaches. The approach surface extends for a horizontal distance of 2,500 feet at a slope of 20 feet outward for each one foot upward.

13. Average Day-Night Sound Level (DNL). Average day-night sound level is the FAA standard measure for determining the cumulative exposure of individuals to noise. DNL is the equivalent of noise levels produced by aircraft operations during a 24-hour period, with a ten-decibel penalty applied to the level measured during nighttime hours (10:00 p.m. to 7:00 am).

14. Conical Surface. An element of the airport imaginary surfaces 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 to a vertical height of 350 feet above the airport elevation.

15. Department of Aviation. The Oregon Department of Aviation, formerly the Aeronautics Division of the Oregon Department of Transportation.

16. FAA. Federal Aviation Administration.

17. FAA's Technical Representative. As used in this ordinance, the federal agency providing the FAA with expertise on wildlife and bird strike hazards as they relate to airports. This may include, but is

not limited to, the USDA-APHIS-Wildlife Services.

18. FAR. Regulation issued by the FAA.

19. FAR Part 77. Regulation, Part 77, "Objects Affecting Navigable Airspace," establishes standards for determining obstructions to navigable airspace.

20. Height. The highest point of a structure or tree, plant or other object of natural growth, measured from mean sea level.

21. 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:

(A) 5,000 feet for all runways designated as utility.

(B) 10,000 feet for all other runways.

(C) The radius of the arc specified for each end of a runway will have the same arithmetical value. That value will be the highest determined for either end of the runway. When a 5,000-foot arc is encompassed by tangents connecting two adjacent 10,000-foot arcs, the 5,000-foot arc shall be disregarded on the construction of the perimeter of the horizontal surface.

22. Non-precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance, or area type navigation equipment, for which a straight-in non-precision instrument approach has been approved, or planned, and for which no precision approach facilities are planned or indicated on an FAA-approved airport layout plan or other FAA planning document.

23. Non-Towered Airport. An airport without an existing or approved control tower.

24. Obstruction. Any structure or tree, plant or other object of natural growth that penetrates an imaginary surface.

25. Other than Utility Runway. A runway that is constructed for and intended to be used by turbine-driven aircraft or by propeller-driven aircraft exceeding 12,500 pounds gross weight.

26. Precision Instrument Runway. A runway having an existing instrument approach procedure utilizing air navigation facilities that provide both horizontal and vertical guidance, such as an Instrument Landing System (ILS) or Precision Approach Radar (PAR). It also means a runway for which a precision approach system is planned and is so indicated by an FAA-approved airport layout plan or other FAA planning document.

27. Primary Surface. A surface longitudinally centered on a runway.

For the Redmond, Bend, Sunriver, and Sisters airports, when a runway has a specially prepared hard surface, the primary surface extends 200 feet beyond each end of that runway. When a runway has no specially prepared hard surface, or planned hard surface, the primary surface ends at each end of that runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is:

- (A) 250 feet for utility runways with only visual approaches,
- (B) 500 feet for utility runways having non-precision instrument approaches,
- (C) 500 feet for other than utility runways having non-precision instrument approaches with visibility minimums greater than three-fourths statute mile, and
- (D) 1,000 feet for non-precision instrument runways with visibility minimums at or below three-fourths statute mile, and for precision instrument runways.

For the Cline Falls and Juniper airports, The primary surface ends at each end of a runway. The elevation of any point on the primary surface is the same as the elevation of the nearest point on the runway centerline. The width of the primary surface is 200 feet.

28. Public Assembly Facility. A permanent or temporary structure or facility, place or activity where concentrations of people gather in reasonably close quarters for purposes such as deliberation, education, worship, shopping, employment, entertainment, recreation, sporting events, or similar activities. Public assembly facilities include, but are not limited to, schools, churches, conference or convention facilities, employment and shopping centers, arenas, athletic fields, stadiums, clubhouses, museums, and similar facilities and places, but do not include parks, golf courses or similar facilities unless used in a manner where people are concentrated in reasonably close quarters. Public assembly facilities also do not include air shows, structures or uses approved by the FAA in an adopted airport master plan, or places where people congregate for short periods of time such as parking lots or bus stops.

29. Runway. A defined area on an airport prepared for landing and takeoff of aircraft along its length.

30. Runway Protection Zone (RPZ). An area off the runway end used to enhance the protection of people and property on the ground. The RPZ is trapezoidal in shape and centered about the extended runway centerline. The inner width of the RPZ is the same as the width of the primary surface. The outer width of the RPZ is a function of the type of aircraft and specified approach visibility minimum associated with the runway end. The RPZ extends from each end of the primary surface for a horizontal distance of:

- (A) 1,000 feet for utility runways.
- (B) 1,700 feet for other than utility runways having non-precision instrument approaches.
- (C) 2,500 feet for precision instrument runways.

[NOTE: the outer width of the RPZ is specified by airport type in OAR 660, Division 13, Exhibit 4]

31. Significant. As it relates to bird strike hazards, "significant" means a level of increased flight activity by birds across an

approach surface or runway that is more than incidental or occasional, considering the existing ambient level of flight activity by birds in the vicinity.

32. Structure. Any constructed or erected object, which requires a location on the ground or is attached to something located on the ground. Structures include but are not limited to buildings, decks, fences, signs, towers, cranes, flagpoles, antennas, smokestacks, earth formations and overhead transmission lines. Structures do not include paved areas.

33. Transitional Surface. Those surfaces that extend upward and outward 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. Transitional surfaces for those portions of the precision approach surfaces which project through and beyond the limits of the conical surface, extend a distance of 5,000 feet measured horizontally from the edge of the approach surface and at a 90 degree angle to the extended runway centerline.

34. Utility Runway. A runway that is constructed for and intended to be used by propeller driven aircraft of 12,500 maximum gross weight and less.

35. Visual Runway. A runway intended solely for the operation of aircraft using visual approach procedures, where no straight-in instrument approach procedures or instrument designations have been approved or planned, or are indicated on an FAA-approved airport layout plan or any other FAA planning document.

36. Water Impoundment. Includes wastewater treatment settling ponds, surface mining ponds, detention and retention ponds, artificial lakes and ponds, and similar water features. A new water impoundment includes an expansion of an existing water impoundment except where such expansion was previously authorized by land use action approved prior to the effective date of this ordinance.

**18.80.024 Imaginary Surface and Noise Impact Boundary Delineation.** For the **Redmond, Bend, Sunriver, and Sisters airports**, the airport elevation, the airport noise impact boundary, and the location and dimensions of the runway, primary surface, runway protection zone, approach surface, horizontal surface, conical surface and transitional surface shall be delineated for each airport subject to this overlay zone and shall be made part of the official Zoning Map. All lands, waters and airspace, or portions thereof, that are located within these boundaries (including direct and secondary impact boundaries) or surfaces shall be subject to the requirements of this overlay zone.

For the Cline Falls and Juniper airports, The airport elevation, the airport noise impact boundary, and the location and dimensions of the runway, primary surface and approach surface shall be delineated for each private use airport subject to this overlay zone and shall be made part of the official Zoning Map. All lands, waters and airspace, or portions thereof, that are located within these surfaces shall be subject to the requirements of this overlay zone. [ORS 836.608(2), (8); OAR 660-013-0050; OAR 660-013-0070(1)(b); OAR 660-013-0155(2)] [ORS 836.619; OAR 660-013-0040(8); OAR 660-013-0070(1)]

**18.80.026 Notice of Land Use and Permit Applications within Overlay Zone Area.** Except as otherwise provided herein, written notice of applications for land use or limited land use decisions, including comprehensive plan or zoning amendments, in an area within this overlay zone, shall be provided to the airport sponsor and the Department of Aviation 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. [ORS 836.623(1); OAR 738-100-010; ORS 215.416(6); ORS 227.175(6)]

For the Redmond, Bend, Sunriver, and Sisters airports:

1. 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 10,000 feet of the sides or ends of a runway:

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

(A) 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.

(B) 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.

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

(D) Notices required under Paragraphs A-C of this section need not be provided to the airport sponsor or the Department of Aviation where the land use or limited land use application meets all of the following criteria:

(1) Would only allow structures of less than 35 feet in height;

(2) Involves property located entirely outside the approach surface;

(3) 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

(4) Does not involve wetland mitigation, enhancement, restoration or creation.

For the Cline Falls and Juniper airports:

3. 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 and the Department of Aviation in the same manner and within the same timelines as notice is provided to property owners entitled by law to written notice of land use or limited land use applications. Where the application does not involve a public hearing, such notice shall be provided at least 20 days prior to entry of the initial decision on the land use or limited land use application. [ORS 215.416(6); ORS 227.175(6); OAR 738-100-010]

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

#### **18.80.028 Height Limitations on Allowed Uses in Underlying Zone**

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 this overlay zone, the underlying zone height limitations shall control. [ORS 836.619; OAR 660-013-0070]

1. Except as provided in subsections 2 and 3 of this Section, no structure or tree, plant or other object of natural growth shall penetrate an airport imaginary surface. [ORS 836.619; OAR 660-013-0070(1)]

2. For areas within airport imaginary surfaces but outside the approach and transition surfaces, where the terrain is at higher elevations than the airport runway surfaces such that existing structures and permitted development penetrate or would penetrate the airport imaginary surfaces, a local government 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, the 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 (for Redmond, Bend and Sunriver.)

#### **18.80.030 Redmond Municipal Airport**

The Redmond Municipal Airport is a Category 1, Commercial Service Airport. Its function is to accommodate scheduled major/national or regional commuter commercial air carrier service. The two approximately 7,040' long by 100'-150' wide, "other than utility" paved runways are located at an elevation of 3,077'. The proposed extension to runway 4-22 and the planned new parallel runway are both identified on the FAA-adopted Airport Layout Plan. Therefore, these improvements are used in the layout of the Airport Safety Combining Zone. The same safety zone dimensional standards used for Runway 4-22 will also apply to the planned parallel runway.

1. Primary Surface - For Redmond, the primary surfaces are 1,000' wide by 7,440' long for Runway 10-28, 1,000' wide by 9,100' long for Runway 4-22, and 1,000' wide by 7,400' long for the proposed new parallel runway.

2. Runway Protection Zone (RPZ)- Two different RPZs apply to the Redmond Airport because it has a total of three potential runways with two possible approaches. Runway 4-22 and the planned parallel runway will both have precision approaches. Runway 10-28 has a non-precision approach on each end. The precision RPZ forms a 1,000' wide by 2,500' long by 1,750' wide trapezoid while the non-precision RPZ forms a 500' wide by 1,700' long by 1,010' wide trapezoid.

3. Approach Surface - The current ILS precision approach surface to runway 22, and the planned precision approaches to Runway 4 and future parallel runway 4-22, are 1,000' wide by 50,000' long by 16,000' wide, with an upward approach slope ratio of 50:1(one foot vertical for each 50 feet horizontal) for the first 10,000', then a slope

ratio of 40:1 for the remaining 40,000'. The non-precision approach surface is 500' wide by 10,000' long by 3,500' wide, with an upward approach slope ratio of 34:1.

4. Horizontal Surface - The surface boundary is comprised of connected arcs drawn 10,000 feet outward and centered on the ends of the primary surface. The elevation of the horizontal surface for the Redmond Airport is 3,227 feet.

#### **18.80.032 Bend Municipal Airport**

Bend Municipal Airport is a Category 2, Business or High Activity General Aviation Airport. The 5,005 long by 75' wide paved runway is located at an elevation is 3,453'. Imaginary surface dimensions for the Bend Airport are based on planned improved operational characteristics, and an upgrade from a "utility" to "other than utility" runway, but do not reflect any planned extension to the existing runway.

1. Primary Surface - For Bend, the primary surface is 500' wide by 5,405' long.

2. Runway Protection Zone (RPZ) - Both Runway #16 and #34 have, or are proposed to have non-precision approaches. Both RPZs begin 200-feet off the ends of the runway. The non-precision RPZs form 500' wide by 1,700' long by 1,010' wide trapezoids.

3. Approach Surface - The non-precision approach surfaces are 500' wide by 10,000' long by 3,500' wide, with an upward approach slope ratio of 34:1(one-foot vertical for each 34 feet horizontal).

4. Horizontal Surface - The surface boundary is comprised of connected arcs drawn 10,000 feet outward and centered on the ends of the primary surface. The height of the horizontal surface for the Bend Airport is 3,603 feet.

#### **18.80.034 Sunriver Airport**

The Sunriver Airport is a Category 4, Community General Aviation Airport. It is privately owned and open to the public. The 5,500' long by 65' wide paved runway is located at an elevation of 4,155'. The Sunriver Airport imaginary surfaces are based on the existing "utility" runway, not

any planned improvements or airport upgrades. If and when planned airport improvements are identified through a master planning process, the County will have the option of adjusting the boundaries of the imaginary surfaces to reflect any planned changes.

1. Primary Surface - For Sunriver, the primary surface is 500' wide by 5,900' long.

2. Runway Protection Zone (RPZ) - The Sunriver Airport has two different approaches. Runway #18 has a non-precision approach, while Runway #36 has a visual approach. The non-precision RPZ forms a 500' wide by 1,700' long by 1,010' wide trapezoid. The visual RPZ is 500' wide by 1,000' long by 700' wide.

3. Approach Surface - The non-precision approach surface is 500' wide by 5,000' long by 2,000' wide, with an upward approach slope ratio of 20:1(one-foot vertical for each 20 feet horizontal). The visual approach is 500' wide by 5,000' long by 1,500' wide at the same 20:1 slope ratio.

4. Horizontal Surface - The surface boundary is comprised of connected arcs drawn 5,000 feet outward and centered on the ends of the primary surface. The elevation of the horizontal surface for the Sunriver Airport is 4,305 feet.

#### **18.80.036 Sisters Eagle Air Airport**

The Sisters Eagle Air Airport is a Category 4, Community General Aviation Airport. It is privately owned and open to the public. The 3,550' long by 50' wide paved runway is located at an elevation of 3,165'.

1. Primary Surface - For Sisters, the primary surface is 250' wide by 3,950' long.

2. Runway Protection Zone (RPZ) - The Sisters Airport has two similar visual approaches. The visual RPZ is 250' wide by 1,000' long by 700' wide.

3. Approach Surface - The visual approach surfaces are 250' wide by 5,000' long by 1,250' wide, with an upward approach slope ratio of 20:1(one-foot vertical for each 20 feet horizontal).

4. Horizontal Surface - The surface boundary is comprised of connected arcs drawn 5,000 feet outward and centered on

the ends of the primary surface. The elevation of the horizontal surface for the Sisters Airport is 3,315 feet.

#### **18.80.038 Cline Falls Airpark**

The Cline Falls Airpark is classified by the state as a privately owned, private-use airport that was the base for 3 or more aircraft as of December 31, 1994. Located at an elevation of 2,920', the single dirt/turf runway is 3,000' long by 100' wide.

1. Primary Surface - The primary surface is 200' wide by 3,000' long.

2. Approach Surface - The dimensions of the visual approach surfaces are 200' wide by 2,500' long by 450' wide, with an upward approach slope ratio of 20:1(one-foot vertical for each 20 feet horizontal).

#### **18.80.040 Juniper Airpark**

The Juniper Airpark is classified by the state as a privately owned, private-use airport that was the base for 3 or more aircraft as of December 31, 1994. Located at an elevation of 3,490', the single turf runway is 2,640' long by 100' wide.

1. Primary Surface - The primary surface is 200' wide by 2,640' long.

2. Approach Surface - The dimensions of the visual approach surfaces are 250' wide by 2,500' long by 450' wide, with an upward approach slope ratio of 20:1(one-foot vertical for each 20 feet horizontal).

#### **18.80.044 Land Use Compatibility Requirements.**

Applications for land use or building permits for properties within the boundaries of this overlay zone shall comply with the requirements of this chapter as provided herein. When compatibility issues arise, the Planning Director or Hearings Body is required to take actions that eliminate or minimize the incompatibility by choosing the most compatible location or design for the boundary or use. Where compatibility issues persist, despite actions or conditions intended to eliminate or minimize the incompatibility, the Planning Director or Hearings Body may disallow the use or expansion, except where the action results

in loss of current operational levels and/or the ability of the airport to grow to meet future community needs. Reasonable conditions to protect the public safety may be imposed by the Planning Director or Hearings Body. [ORS 836.619; ORS 836.623(1); OAR 660-013-0080]

1. Noise. Within airport noise impact boundaries, land uses shall be established consistent with the levels identified in OAR 660, Division 13, Exhibit 5 (Table 2 of this Chapter). 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 record in the Deschutes 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 the allowed airport activities at the adjacent airport. In areas where the noise level is anticipated to be at or above 55 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.]

2. 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. No use shall imitate airport lighting or impede the ability of pilots to distinguish between airport lighting and other lighting.

3. 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 or on nearby lands where glare could impede a pilot's vision.

4. 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.

5. 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 this overlay zone shall be coordinated with the Department of Aviation and the FAA prior to approval. Approval of cellular and other telephone or radiocommunication towers on leased property located within airport imaginary surfaces shall be conditioned to require their removal within 90 days following the expiration of the lease agreement. A bond or other security shall be required to ensure this result.

6. Limitations and Restrictions on Allowed Uses in the RPZ, Approach Surface, and Airport Direct and Secondary Impact Areas.

For the Redmond, Bend, Sunriver, and Sisters airports, the land uses identified in Table 1, (at the end of this chapter) and their accessory uses, are permitted, permitted under limited circumstances, or prohibited in the manner therein described. In the event of conflict with the underlying zone, the more restrictive provisions shall control. As used in this section, a limited

use means a use that is allowed subject to special standards specific to that use.

**18.80.050 Uses Permitted Outright.**

Any uses permitted outright in the underlying zone with which the AS Zone is combined shall be allowed except as provided in Section 18.80.044.

**18.80.054 Conditional Uses.**

Uses permitted conditionally shall be those identified as conditional uses in the underlying zone with which the AS Zone is combined, and shall be subject to all conditions of the underlying zone except as provided in Section 18.80.044.

**18.80.056 Additional Requirements.**

As a condition of approval of any conditional use proposed within any AS Zone, the Planning Director or Hearings Body may require: (Ord. 91-020 § 1, 1991)

1. An increase in required setbacks.
2. Additional off-street parking and loading facilities and building standards.
3. Limitations on signs or lighting, hours of operation, points of ingress and egress and building heights.
4. Additional landscaping, screening and other improvements.
5. Use of glare-resistant materials in construction or other methods likely to reduce operating hazards.
6. Other conditions considered necessary to achieve compliance and policies of the comprehensive plan. (Ord. 80-221 § 1, 1980)

**18.80.058 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. Notwithstanding subsection 1. of this section, the owner of any existing structure that has an adverse effect on air

navigation safety as determined by the Department of Aviation shall install or allow the installation of obstruction markers as deemed necessary by the Department of Aviation, so that the structures become more visible to pilots.

3. 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 this overlay zone.

**18.80.060 Variances**

1. Any person desiring to erect or increase the height of any structure, or use not in accordance with provisions prescribed in this Ordinance may apply for a variance.

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 as to require the owner of the structure to install, operate and maintain obstruction markers, at the owner's expense,

**18.80.062 Dimensional Standards.**

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

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

3. The airport owners, or their agents, shall be permitted at mutually agreed upon times to enter onto private property to reduce the height of trees that exceed the height limitations herein established.

**18.80.064 Procedures.**

An applicant seeking a land use or limited land use approval in an area within this overlay zone 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 Community Development Department 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.

And, additionally, if a height variance is requested:

3. Letters of support from the airport sponsor, the Department of Aviation and for Redmond, Bend and Sunriver Airports, the FAA as well. The letter(s) shall include specific references to the particular variance and findings for approval.

**18.80.072 Water Impoundments within Approach Surfaces and Airport Direct and Secondary Impact Boundaries.**

Any use or activity that would result in the establishment or expansion of a water impoundment shall comply with the requirements of this section. (ORS 836.623(2); OAR 660-013-0080(1)(f))

1. No new or expanded water impoundments of one-quarter acre in size or larger are permitted:

(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 that is necessary for airport operations.

2. New or expanded water impoundments of one-quarter acre in size or larger are permitted:

(A) Within 10,000 feet from the end or edge of a runway (outside an approach surface), or

(B) Between 5,000 feet and 40,000 feet within an approach surface for an airport with a precision instrument approach, unless Deschutes County first adopts findings of fact, supported by substantial evidence in the record, that the impoundments are likely to result in a significant increase in hazardous

movements of birds feeding, watering or roosting in areas across the runways or approach corridors.

[NOTE: FAA Part 77 discourages water impoundments within 50,000 feet of a runway, within an approach surface.] [ORS 836.623(2)(c); OAR 660, Division 13, Exhibit 1, Section 3(b)(C);]

3. Process. An application for approval of a new water impoundment shall be considered utilizing the review process applied to applications for conditional use permits. In addition to the parties required by law to be mailed written notice of the public hearing on the application, written notice of the hearing shall be mailed to the airport sponsor, the Seattle Airports District Office of the FAA, the FAA's technical representative, and the Oregon Department of Aviation.

(A) Prior to filing its application, the applicant shall coordinate with the airport sponsor, the Department of Aviation, and the FAA (Seattle Airports District Office) and FAA's technical representative regarding the proposed water impoundment, its short and long term potential to significantly increase hazardous movements of birds feeding, watering or roosting in areas across runways or approach surfaces, and proposed mitigation.

(1) For water impoundments individually or cumulatively exceeding five (5) acres in size on the subject property, the applicant shall prepare a draft bird strike study as provided in subsection (2) of this section. The airport sponsor, the Department of Aviation, and the FAA and FAA's technical representative shall have 45 days to review the study draft. Their comments shall be included and addressed in a final bird strike study.

(2) For water impoundments that do not individually or cumulatively exceed five (5) acres in size on the subject property, the bird strike study requirements in subsection (B) of this section may be reduced or waived upon agreement by the airport sponsor, the Department of Aviation, and the FAA and FAA's technical representative if the applicant can

demonstrate, to the satisfaction of the airport sponsor, the Department of Aviation, and the FAA and FAA's technical representative that the proposed water impoundment, with appropriate short and long term mitigation, will not result in a significant increase in hazardous movements of birds feeding, watering or roosting in areas across runways or approach surfaces. As used herein, "appropriate mitigation" means small scale measures of proven reliability that can be applied in perpetuity and that the applicant has the financial resources to support.

(3) An application shall not be deemed complete for land use review purposes until the applicant has filed with the Director the final bird strike study addressing comments from the airport sponsor, the Department of Aviation, and the FAA and FAA's technical representative. When no bird strike study is required, the application shall not be deemed complete until the applicant has filed with the Director correspondence or other proof demonstrating agreement among the airport sponsor, the Department of Aviation, and the FAA and FAA's technical representative that no bird strike study is required.

(B) Bird Strike Study. A bird strike study required under this section shall contain at least the following information:

(1) A description of the proposed project, its location in relation to the airport, and the bird strike study area, which shall include at least the project site, the airport property, all lands within 10,000 feet from the end or edge of the airport runway, and other surrounding habitat areas which form the local bird ecosystem.

(2) A description of bird feeding, watering and roosting habitats in the bird strike study area, including discussion of feeding behavior and food sources and identification of loafing, watering, roosting and nesting area locations.

(3) A description of existing and planned airport operations and air traffic patterns and any available history of bird strike incidents.

(4) Wildlife surveys and documentation of existing bird species, populations, activities and flight patterns in the bird strike study area. The surveys shall address bird species and their composition; bird population estimates and densities per unit area; feeding behavior; food sources; seasonal use patterns; frequency of occurrence; location of loafing, roosting and nesting areas; and analysis of the relation of bird flight movements to airport traffic patterns and navigational safety. The airport sponsor shall provide approach and departure air space information up to five statutory miles from the airport.

(5) An evaluation of the anticipated effects of the proposal on the population density, behavior patterns, movements and species composition of birds within the bird strike study area and of the impact of these effects on air navigation and safety considering possible mitigation.

(6) Identification and evaluation of proposed and alternative short and long term mitigation measures that would prevent a significant increase in hazardous movements of birds feeding, watering or roosting in areas across runways and approach surfaces that otherwise might result from the proposed use. The evaluation shall discuss the proven reliability of proposed measures, their effectiveness over both the short and long term, their costs, and the applicant's financial ability to assure their perpetual implementation, i.e. ongoing implementation for as long as a potential bird strike hazard persists.

(7) Such other information as is recommended by the FAA's technical representative or is required to demonstrate compliance with the requirements of subsection (C) of this section.

(C) Required Findings. The determination whether a proposed new water impoundment, with reasonable and practicable mitigation measures, is likely to significantly increase hazardous movements of birds feeding, watering or roosting in areas across runways or approach surfaces shall be based upon the proposal's

potential, both in the short term and in the long term, to significantly increase bird strike hazards to air navigation, and the appropriateness, effectiveness and affordability of proposed mitigation measures or other conditions needed to reduce bird strike hazards. In determining compliance with this standard, the findings shall address each of the following factors:

(1) The demonstrated overall effectiveness and reliability of proposed measures and conditions, in both the short and long term and under similar circumstances and conditions, to avoid a significant increase in bird strike hazards to air navigation. Experimental measures or measures not based on accepted technology and industry practices shall be considered ineffective, inappropriate and of unproven reliability.

(2) The economic, social and environmental impacts of proposed measures to the neighboring community and the affected natural environment.

(3) The applicant's ability to pay for necessary short and long-term mitigation measures, including fallback measures that may be required if initially proposed mitigation measures prove ineffective, and to assure the perpetual implementation of those measures for as long as a potential bird strike hazard persists. An applicant's failure to demonstrate its financial ability to assure the perpetual implementation of necessary and appropriate measures shall render those measures unreasonable and impracticable for purposes of the application.

(4) The applicant's ability to accurately monitor the effectiveness of mitigation over time.

(5) The potential impacts to navigational safety and air travel if the applicant cannot perform necessary mitigation measures or maintain those measures in perpetuity, or if those measures prove to be ineffective at avoiding a significant increase in bird strike hazards to air navigation.

(6) The applicant's reclamation plan.

(D) Mitigation Measures and Approval Conditions. A decision approving an application shall require, as conditions of approval, all measures and conditions deemed appropriate and necessary to prevent in perpetuity a significant increase in hazardous movements of birds feeding, watering or roosting in areas across runways and approach surfaces.

(1) Only customary measures based on accepted technology and industry practice may be considered and imposed as approval conditions.

(2) Serious consideration shall be given to all measures and conditions recommended by the Department of Aviation and the FAA and FAA's technical representative. Generally, such measures and conditions shall be attached to a decision approving an application unless findings are adopted, supported by substantial evidence, demonstrating why such measures and conditions are not necessary to reduce bird hazard impacts resulting from the water impoundment to an insignificant level.

(3) A decision to approve shall require from the applicant a performance bond or other form of secure financial support. Such bond or security shall be in an amount sufficient to assure perpetual implementation of appropriate and necessary mitigation measures for as long as a potential bird strike hazard persists.

(4) A decision to approve shall require appropriate monitoring of the effectiveness of mitigation over time. Upon request, monitoring data and reports shall be made available to the airport sponsor, the Department of Aviation, and the FAA and FAA's technical representative. The decision shall allow for modifications to approval conditions should existing mitigation measures prove ineffective at preventing a significant increase in hazardous movements of birds feeding, watering or roosting in areas across runways and approach surfaces. Modifications to approval conditions shall be considered utilizing the review process

applied to applications for conditional use permits.

(E) Exemptions. The requirements of this section shall not apply to:

(1) Storm water management basins established by an airport identified under ORS 836.610(1).

(2) Seaplane landing areas within airports identified under ORS 836.610(1).

(3) Lands owned or managed by Sunriver Resort, Crosswater and their affiliates.

**18.80.074 Wetland Mitigation, Creation, Enhancement and Restoration within Approach Surfaces and Airport Direct and Secondary Impact Boundaries.**

1. Notwithstanding the requirements of Section 072, wetland mitigation, creation, enhancement or restoration projects located within areas regulated under Section 072 shall be allowed upon demonstration of compliance with this requirements of this Section.

2. Wetland mitigation, creation, enhancement or restoration projects existing or approved on the effective date of this ordinance and located within areas regulated under Section 072 are recognized as lawfully existing uses.

3. To help avoid increasing safety hazards to air navigation near public use airports, the establishment of wetland mitigation banks in the vicinity of such airports but outside approach surfaces the areas regulated under Section 072 is encouraged.

4 Applications to expand wetland mitigation projects in existence as of the effective date of this ordinance, and new wetland mitigation projects, that are proposed within areas regulated under Section 072 shall be considered utilizing the review process applied to applications for conditional use permits and shall be permitted upon demonstration that:

(A) The affected wetlands provide unique ecological functions, such as critical habitat for threatened or endangered species or ground water discharge, and it is

not practicable to provide the mitigation off-site; and

(B) The wetland creation, enhancement or restoration is designed and will be maintained in perpetuity in a manner that will not increase hazardous movements of birds feeding, watering or roosting in areas across runways or approach surfaces.

5. Wetland mitigation permitted under subsection 4 of this Section shall be designed and located to avoid creating a wildlife hazard or increasing hazardous movements of birds across runways or approach surfaces.

6. Proposals for new or expanded wetland mitigation, creation, enhancement or restoration projects regulated under this Section shall be coordinated with the airport sponsor, the Department of Aviation, the FAA and FAA's technical representative, the Oregon Department of Fish & Wildlife (ODFW), the Oregon Division of State Lands (DSL), the US Fish & Wildlife Service (USFWS), and the US Army Corps of Engineers (Corps) as part of the permit application.

7. Exemptions. The requirements of this section shall not apply to:

(A) Activities related to the management or modification of golf courses owned or managed by Sunriver Resort, Crosswater and their affiliates.

**18.80.076 Water Impoundment Notification**

1. Deschutes County shall provide notice to the Oregon Department of Aviation when it, or its designee, receives an application for a comprehensive plan amendment, zone change or permit as defined in ORS 215.402 or 227.160 that, if approved, would result in a water impoundment larger than one-quarter acre within 10,000 feet of the Redmond, Bend, Sunriver or Sisters Airports.

2. A final determination regarding a new water impoundment described in ORS 836.623 shall be made by local governments as provided in ORS 836.623.

**18.80.078 FAA Notification (Form 7460-1)**

1. Federal Aviation Regulation (FAR) Part 77 requires that anyone proposing to construct anything which may obstruct the use of airspace by aircraft to provide a notice to that effect to the FAA. Generally, construction proposals in the vicinity of airports may obstruct airspace. Notice to the FAA is required for anything which may affect landing areas, either existing or planned, which are open to the public, or are operated by one of the armed forces.

2. FAA Form 7460-1 "Notice of Proposed Construction or Alteration" is the notification form. It is to be submitted by the applicant directly to the FAA. Forms are available from the Oregon Department of Aviation or the Northwest Regional Office of the FAA.

3. FAA Form 7460-1 should be submitted if the proposed construction or alteration meets the following criteria:

(A) Anything over 200' AGL (above ground level at the site).

(B) Proposals in the vicinity of an airport, if the proposal would be higher than a slope from the nearest point on a runway and increasing its elevation at a ratio of:

Longest Runway	Proximity to Runway	Slope
> 3,200'	Within 20,000'	100 to 1
3,200' or less	Within 10,000'	50 to 1
For a Heliport	Within 5,000'	25 to 1

4. For identification purposes, Deschutes County has established FAA Notification Areas around each of the public use airports within Deschutes County. The boundaries of these areas are based on the runway length. If a proposed construction project is located in one of these areas, the applicant shall determine if the height of the proposed project will require FAA notification as per 18.80.076(3) above. In Deschutes County, each of the public-use airports has a runway longer than 3,200 feet. Therefore, each FAA notification area includes all land within 20,000 feet of each

airport's runway(s), and the slope to be used is 100 to 1.

5. FAA notification is NOT required for any of the following construction or alteration:

(A) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(B) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

(C) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device, of a type approved by the Administrator, or an appropriate military service on military airports, the location and height of which is fixed by its functional purpose.

(D) Any construction or alteration for which notice is required by any other FAA regulation.

**TABLE 1--Land Use Compatibility**

<b>Use:</b>	<b>Location:</b>				
	<b>RPZ<sup>(1)</sup></b>	<b>Transitional Surface</b>	<b>Approach Surface<sup>(8)</sup></b>	<b>Direct Impact Area</b>	<b>Secondary Impact Area</b>
<b>Public Airport</b>	L <sup>(2)</sup>	P	L <sup>(9)</sup>	P	P
<b>Residential</b>	N	N	L <sup>(10)</sup>	P	P
<b>Commercial</b>	N	L <sup>(14)</sup>	L <sup>(9)</sup>	P	P
<b>Industrial</b>	N	P	L <sup>(9)</sup>	P	P
<b>Institutional</b>	N	L <sup>(14)</sup>	L <sup>(9)</sup>	P	P
<b>Farm Use</b>	P <sup>(3)</sup>	P <sup>(3)</sup>	P <sup>(3)</sup>	P <sup>(3)</sup>	P <sup>(3)</sup>
<b>Road/Parking</b>	L <sup>(4)</sup>	P	P	P	P
<b>Utility</b>	L <sup>(5)</sup>	L <sup>(5)</sup>	L <sup>(5)</sup>	L <sup>(5)</sup>	L <sup>(5)</sup>
<b>Parks/Open Space</b>	L <sup>(6)</sup>	P	P	P	P
<b>Golf Course <sup>(17)</sup></b>	L <sup>(7)</sup>	L <sup>(7)</sup>	L <sup>(7,9)</sup>	L <sup>(7)</sup>	L <sup>(7)</sup>
<b>Athletic Field</b>	N	N	L <sup>(9)</sup>	P	P
<b>Sanitary Landfill</b>	N	N	N	N	N <sup>(16)</sup>
<b>Waste Water Treatment Plant</b>	N	N	N	N	L <sup>(15)</sup>
<b>Mining</b>	N	N	L <sup>(11)</sup>	L <sup>(11)</sup>	L <sup>(11)</sup>
<b>Water Impoundment</b>	N	N	N,L <sup>(12)</sup>	L <sup>(12)</sup>	L <sup>(12)</sup>
<b>Wetland Mitigation</b>	N	N	L <sup>(13)</sup>	L <sup>(13)</sup>	L <sup>(13)</sup>

Key to Table:

P = Use is Permitted.

L = Use is Allowed Under Limited Circumstances (see footnotes).

N = Use is Not Allowed.

Numbers in parentheses refer to footnotes on next page.

**Notes for Table 1:**

1. No structures shall be allowed within the Runway Protection Zone. Exceptions shall be made only for structures accessory to airport operations whose location within the RPZ has been approved by the Federal Aviation Administration.
2. In the RPZ, public airport uses are restricted to those uses and facilities that require location in the RPZ.
3. Farming practices that minimize wildlife attractants are encouraged.
4. Roads and parking areas are permitted in the RPZ only upon demonstration that there are no practicable alternatives. Lights, guardrails and related accessory structures are prohibited. Cost may be considered in determining whether practicable alternatives exist.
5. In the RPZ, utilities, power lines and pipelines must be underground. In approach surfaces and in airport direct and secondary impact areas, the proposed height of utilities shall be coordinated with the airport sponsor and the Department of Aviation.
6. Public assembly facilities are prohibited within the RPZ.
7. Golf courses may be permitted only upon demonstration, supported by substantial evidence, that management techniques will be utilized to reduce existing wildlife attractants and avoid the creation of new wildlife attractants. Such techniques shall be required as conditions of approval. Structures are not permitted within the RPZ. For purposes of this Chapter, tee markers, tee signs, pin cups and pins are not considered to be structures.
8. Within 10,000 feet from the end of the primary surface of a non-precision instrument runway, and within 50,000 feet from the end of the primary surface of a precision instrument runway.
9. Public assembly facilities may be allowed in an approach surface only if the potential danger to public safety is minimal. In determining whether a proposed use is appropriate, consideration shall be given to: proximity to the RPZ; density of people per acre; frequency of use; level of activity at the airport; and other factors relevant to public safety. In general, high density uses should not be permitted within airport approach surfaces, and non-residential structures should be located outside approach surfaces unless no practicable alternatives exist.
10. Residential densities within approach surfaces should not exceed the following densities: (1) within 500 feet of the outer edge of the RPZ, 1 unit/acre; (2) within 500 to 1,500 feet of the outer edge of the RPZ, 2 units/acre; (3) within 1,500 to 3,000 feet of the outer edge of the RPZ, 4 units/acre.
11. Mining operations involving the creation or expansion of water impoundments shall comply with the requirements of this Chapter regulating water impoundments.
12. See Section 072 regulating water impoundments.
13. See requirements in Section 074.
14. Overnight accommodations, such as hotels, motels, hospitals and dormitories, are not permitted.
15. Due to land availability constraints, limited wastewater treatment plants within the Secondary Impact Area are permitted on lands owned or managed by the Sunriver Resort or Sunriver utilities.
16. Organic composting facility is permitted.
17. Since Sunriver Resort owns and controls the Sunriver Airport, golf courses operated as part of the Sunriver Resort, Crosswater and their affiliates are exempted.

**TABLE 2--Noise Compatibility\***

**Yearly Day-Night Average Sound Levels Yearly  
day-night average sound level (DNL) in decibels**

<b>Land Uses</b>	<b>Below 65</b>	<b>65-70</b>	<b>70-75</b>	<b>75-80</b>	<b>80-85</b>	<b>Over 85</b>
<b>Residential</b>						
Residential, other than mobile homes and transient lodgings	Y	N(1)	N(1)	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N(1)	N(1)	N(1)	N	N
<b>Public Use</b>						
Schools	Y	N(1)	N(1)	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Governmental services	Y	Y	25	30	N	N
Transportation	Y	Y	Y(2)	Y(3)	Y(4)	Y(4)
Parking	Y	Y	Y(2)	Y(3)	Y(4)	N
<b>Commercial Use</b>						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail—building materials, Hardware and farm equipment	Y	Y	Y(2)	Y(3)	Y(4)	N
Retail trade—general	Y	Y	25	30	N	N
Utilities	Y	Y	Y(2)	Y(3)	Y(4)	N
Communication	Y	Y	25	30	N	N
<b>Manufacturing and Production</b>						
Manufacturing general	Y	Y	Y(2)	Y(3)	Y(4)	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y(6)	Y(7)	Y(8)	Y(8)	Y(8)
Livestock farming and breeding	Y	Y(6)	Y(7)	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
<b>Recreational</b>						
Outdoor sports arenas and spectator sports	Y	Y(5)	Y(5)	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts and camps	Y	Y	Y	N	N	N
Golf courses, riding stables and water recreation	Y	Y	25	30	N	N

Numbers in parentheses refer to notes.

\*The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the

relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.

Key to Table:

**SLUCM** = Standard Land Use Coding Manual.

**Y (Yes)** = Land Use and related structures compatible without restrictions.

**N (No)** = Land Use and related structures are not compatible and should be prohibited.

**NLR** = Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.

**25, 30, or 35** = Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 dB must be incorporated into design and construction of structure.

Notes for Table 2:

- (1) Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.
- (2) Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (3) Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.
- (4) Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal level is low.
- (5) Land use compatible provided special sound reinforcement systems are installed.
- (6) Residential buildings require an NLR of 25.
- (7) Residential buildings require an NLR of 30.
- (8) Residential buildings not permitted.

**Declaration of Anticipated Noise**

As a condition of the grant of development approval pursuant to Chapter 18.80 of the Deschutes County Code, the undersigned, hereinafter referred to as Grantees (whether singular or plural), hereby covenant and agree that they shall not, by reason of their ownership or occupation of the following described real property, protest or bring suit or action against the \_\_\_\_\_ Airport or Deschutes County, for aviation-related noise, including property damage or personal injury from said noise connected when such activities conform to:

- 1. Airport activities lawfully conducted in connection with a pre-existing airport, as that term is defined in Section 18.80.022(2) of the Deschutes County Code, at the described airport; or
- 2. Airport activities that might be lawfully conducted in the future at the described airport under County or State permits or exemptions.

The real property of Grantees subject to this covenant and agreement is situated in Deschutes County, State of Oregon, and described as Tax Lot \_\_\_\_\_ of Township \_\_\_\_\_ Range \_\_\_\_\_ E.W.M., Section \_\_\_\_\_, and further described as \_\_\_\_\_.

Grantor(s) acknowledge that by virtue of such grant he/they have no remaining rights to complain or protest about the protected activities described above.

This Declaration of Anticipated Noise runs with the land and is binding upon the heirs, successors and assigns of the undersigned's interest in the described real property or any persons acquiring through he undersigned an interest in the described real property.

Deschutes County requires the execution of this covenant and agreement by the Grantees as a pre-requisite to Deschutes County approving a partition, subdivision, or issuing a building permit for Grantees development on the above described real property, which real property is located within the noise impact boundary of the \_\_\_\_\_ Airport. This agreement is executed for the protection and benefit of the \_\_\_\_\_ Airport and Deschutes County interest in said airport and to prevent development in adjacent lands to said airport which will interfere with the continued operation existent and development of said airport.

STATE OF OREGON, Deschutes County: ss

Grantor(s)

\_\_\_\_\_  
\_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 2000, the undersigned, a notary Public in and for said County and State, personally appeared the within named \_\_\_\_\_, and \_\_\_\_\_ who are known to me to be the identical individuals described in and who executed the within instrument and acknowledged to me that they executed the same freely and voluntarily.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

\_\_\_\_\_

Notary Public for: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_