RFDS 2.00 ACCESS

General Access Requirements: see the C.D.G. 20 D 210.20, Appendix 20 D-3 (12/00 edition).

2.1; FIRE APPARATUS ACCESS

2.1.1; DESIGN CRITERIA:

2.1.1.1 Emergency vehicle access roadways shall have a minimum unobstructed width of 20 feet with a minimum 25-foot interior turning radii, 45-foot exterior turning radii, and a 13'6" vertical clearance. Some turnaround designs may require a 28-foot radius entering or exiting the turnaround. See details in CDG appendix 20 D-3.

Exception: Where an access road serves only one or two dwelling units and exceeds 50 feet, such access may be reduced to an unobstructed width of 14 feet when an approved 20' x 50' emergency vehicle operations area (EVOA) is provided in the direction of travel, and within 150 feet of all portions of the exterior wall of the dwelling as measured along an approved path. The transition between the 14' access road and the EVOA shall be tapered. All inside turning radii shall be a minimum of 25 feet.

2.1.1.2 Access roadways must extend to within 150 feet of all portions of the exterior wall, and for commercial / multi family buildings within 50 feet of at least 25% of the building perimeter, as measured along an approved path.

2.1.1.3 Roadways shall have an all-weather driving surface per City of Redmond standards. It shall be in place and able to support the weight of fire department vehicles, 77,000 pounds and a point load of 45,000 pounds over a 24"x24" pad, or as determined by the City of Redmond Engineer prior to the delivery, use, or storage of combustible building materials to or at the site except small amounts used for concrete forms. With the approval of the Fire Code Official an approved alternate surface may be installed, to a minimum of manufacturer's specifications and City of Redmond, Public Works, Standard details.

2.1.1.4 Fire lanes shall be located wherever curbs, road edges, or loading areas are adjacent to the 20 foot wide vehicle access roadway. Such fire lanes shall be marked as identified in this Standard.

2.1.1.5 The emergency vehicle access roadway shall have a maximum grade of 10%. If the access grade is 10% or over, all structures shall be provided with automatic fire sprinklers. When off site access grades or on site grades are 11% or more, a design (plan and profile) of the proposed roadways must be submitted during Technical Committee review showing the extent and degree of overage in order to determine the mitigation which may be required as identified in RMC 15.06.17. In some cases adequate mitigation may not be possible and proposed lots may be designated as "un-buildable".

2.1.1.6 Dead ends shall not be longer than 150 feet without providing a turnaround. When turnarounds are provided they shall be installed per City of Redmond Standards.

2.1.1.6.1 Exception: When the access serves only single family residences all equipped with automatic fire sprinklers, the dead end access may be increased to 300', without providing a turnaround.

2.1.1.7 Distances to and around buildings shall be measured along the center line of access roads. In determining the placement of access roads the dimension around a building shall be measured at a distance of no closer than 10 feet to the structure (1/2 the minimum width of the fire access roadway).

2.1.1.8 Where more than 100 units are designed in a residential development, either single family, multifamily, retirement or similar, there shall be a minimum of two access points to the street system. Such access points shall be so located so as to provide for general circulation, alternate emergency vehicle access routes, through access and general area transportation design considerations.

2.1.1.9 Installation of obstructions or gates across required fire access roads shall be as follows, unless specifically approved by the Fire Code Official:

Required access:

Gate shall be a strobe-activated electric gate(s) with key and manual overrides, and must have the approval of the Redmond Fire Marshal.

"Emergency Vehicle Use Only" access:

Gate or chain must have the approval of the Redmond Fire Marshal.

2.1.1.10 The design for any bridge or structure to be used for emergency vehicle access shall be approved by the City of Redmond Engineering Department (77,000 pounds and a point load of 45,000 pounds over a 24"x24" pad). Driving surfaces that are **not** designed to support the weight of emergency vehicles shall be conspicuously signed and/or gated in an approved manner.

2.1.2; FIRE LANES:

2.1.2.1 Fire apparatus access roadways shall be marked in order to identify their required location and width. Required fire access roadways, or "Fire Lanes", may be established at the time of plan review, pre-construction site inspection, and/or post construction site inspection. Additional fire lanes, marking, or re-marking may be required anytime during the life of the development upon evaluation by and direction of the Fire Marshal. Generally a fire lane shall be identified wherever curbs, road or street edges, or loading areas are adjacent to the vehicle access roadway. Fire Lane marking is not required where marked parking stalls are adjacent to the Fire Lane.

Fire Lanes shall be marked as directed with stripping and lettering (Type 1&2) or stripping and signs (Type 1&3) by using the following Types of marking. Where paint is designated, it shall be 'safety yellow'.

Type 1 – Curb Stripping

Vertical curbs shall be painted on the top and side, extending the length of the designated fire lane. Type 1 marking of a rolled curb may be with a minimum 6 inch painted stripe on the top most part of the curb.

Type 2 – Pavement Lettering

Pavement adjacent to designated curbs, edge, or line shall be painted with 18" tall block letters having a minimum 3" wide stroke and shall spell out: "FIRE LANE - NO PARKING". There shall be no more than 50' between repetitions and no more than 10', no less than 4' between "FIRE LANE" and "NO PARKING". Where there is not enough room along a curb for both phrases, "FIRE LANE" shall be used. The top of the letters of each word shall be closest to, and parallel to, the adjacent edge, curb, or line. In most cases both sides of the access shall be marked. Where long drives are to be marked the repetitions may alternate sides of the drive, if in the opinion of the Fire Marshal, effective marking is accomplished.

Type 3 – Metal Signs
Approved metal signs stating "NO PARKING-FIRE LANE" or "NO PARKING-THIS SIDE OF STREET" shall be posted at intervals of 50 to 100-feet on center. Signs shall clearly indicate the extent and location of the required fire lane. (Examples: 'this side of street, north of here, between signs, etc,) Additional locations may be designated by the Fire Marshal. Such signs shall be approximately 12" wide and 18" high and have red letters on a white background. See City of Redmond Design and Construction drawing number 499.

Where fire lanes are adjacent to buildings or structures the signs may be placed on the building or structure face when approved or directed by the Fire Marshal.

Type 4 – Edge Striping
Where there is no curb, a nominal 6" yellow stripe shall be painted on the pavement along the edges of the approved fire lane. Pavement lettering or Fire Lane signage shall be provided as required for Type 1 or Type 2 as designated by the Fire Marshal.

Type 5 – Diagonal Striping
Specifically designated areas shall require diagonal, painted, striping across the width of the fire lane. Diagonal striping shall be used in conjunction with Type 1 (painted curbs) and/or Type 4 (edge striping), and shall run at an angle of 30 to 60 degrees from one side to the other. These diagonal lines shall be parallel with each other, be a nominal 6" wide and be approximately 24" apart. A blank area shall be maintained under and within 18" of the lettering. Lettering shall occur as with Type 2 marking. Type 3 (Metal signs) may be used in lieu of Type 2 (pavement lettering) when specifically approved by the Fire Marshal.

Type 6 – Raised Marking
Where fire lanes are constructed level with non-drivable surrounding grades approved raised marking shall be required. Raised marking may consist of plantings, curbs, posts, and/or similar features that provide raised differentiation of the driving surface from the adjoining grade.

Type 7 – Warning Signs
When identified by the land owner or developer that an area adjacent to or a continuing from a required access road is sufficient for some vehicles, but not emergency vehicles, approved warning signs and/or gates shall be required to be provided and maintained to clearly differentiate the limits of the required fire access. (Vaults, parking garages, bridges, etc…)

2.1.2.2 Fire lane markings shall be maintained as needed to clearly identify the designated area as being a fire lane.

2.1.2.3 Required access roads with a width less than 28 feet are required to be marked on both sides of the access road as a Fire Lane. Road widths 28 feet to 34 feet shall mark one side of the access drive, and mark the opposite side for parking or a Type 4 marking.

2.2; ADDRESSING

2.2.1; ADDRESSING CONVENTION: The following standard is a compilation of Redmond Building Division Standards, Redmond Fire Department Standards, and King County grid conventions for addressing.

2.2.1.1; Commercial and Multifamily Addressing:

Commercial and multifamily projects will be designated with one street address per building. Buildings with zero lot lines shall be considered separate and distinct buildings for the purposes of addressing. Detached parking garages, which have their own fire protection or suppression systems, shall be assigned addresses separate from the building they serve. Parking structures directly attached to multiple buildings that contain their own fire protection or suppression systems, shall be assigned a separate address from the buildings they serve.

Floor level designations shall be indicated as follows as determined from the addressed side ('A' side), of the structure:

- Above ground floors in buildings shall be 1,2,3,4, etc. in an ascending order.
- Below ground floors in buildings shall be 01,02,03,04, etc. in a descending order.
- Above ground levels in parking structures shall be P1, P2, P3, P4 etc. in an ascending order.
- Below ground levels in parking structures shall be P01, P02, P03, P04 etc. in descending order.
- Mezzanines shall be identified with the floor they are part of for example P1-Mezz, P2-Mezz, 1-Mezz, etc.

Individual residential living units (units) and individual commercial tenant spaces (suites) shall have their own 3 or 4 digit unit or suite number, as approved by the Fire Marshal.

Provisions shall be made to allow for future smaller divisions of the building when assigning suite numbers within a new building. Where subdivision of existing space does not allow for a separate new number within the sequence then an alpha designator may be used with the original unit number (i.e.: 101 divides into 101a and 101b when there is a 100 unit and a 102 unit).

Unit and suite numbers shall be sequential and where applicable proceed from left to right, as indicated when facing the building from the addressed side. When there are interior and exterior units or suites on the same floor they shall be numbered in a logical and sequential manner as approved by the Fire Marshal. When designating suite numbers consideration shall be given to future configurations of the building and appropriate spacing shall be left in the numbering sequence.

When buildings have multiple access points from different streets the assigned address shall be posted on, above or adjacent to said access points.

In the case of stacked units the numbering shall be consistent floor to floor. The first digit shall designate the floor and the remaining digits shall be the same vertically as follows:

- Unit 301 would be on the third floor and over unit 201.

- Unit 201 would be on the second floor and over unit 101.
- Unit 101 would be on the first floor

Accessory Dwelling units

Attached and detached accessory dwelling units (ADU's), when addressed, shall be addressed the same as the primary dwelling with the addition of a numerical designator. (Example: ADU = 15670 #1 NE 85 Street) Alpha or ½ designators shall not be used.

2.2.1.2; Street Grid Convention:

(See Public Works Standard Details drawing number 908.)

2.2.1.2.1; "Avenues" are primary grid, through streets that run north and south (_ _ _ _ _ _ Avenue N.E.)

2.2.1.2.2; "Streets" are primary grid, through streets that run east and west (N.E. _ _ _ _ _ _ St.)

2.2.1.2.3; "Places" are non-through, non dead end streets that run north and south & parallel "avenues"

2.2.1.2.4; "Ways" are non-through, non dead end streets that run east and west & parallel "streets"

2.2.1.2.5; "Courts" are dead end streets that run in either north/south or east/west

2.2.1.2.6; "Circle" shall be used only for loop roads that make an entire circle.

2.2.1.2.7; Odd numbered addresses shall be used on the west and south

2.2.1.2.8; Even numbered addresses shall be used on the north and east

2.2.1.2.9; Numbers get larger when going north and east, and shall be consistent with the King County grid.

2.2.1.2.10; Where diagonal streets are proposed they shall be designated as close to the grid as possible and in logical relationship to existing, intersecting "streets" or "avenues"

2.2.1.2.11; Any subdivision with its own interior access street and having more than four lots shall be addressed off of the interior access street

2.2.1.2.12; The owner shall be required to install all necessary or required street signs.

2.2.1.2.13: New named streets may only be used where no buildings or facilities are addressed from it. Buildings or facilities shall not be addressed off of named streets; they shall only be addressed from numbered streets or avenues. Unless approved by the Fire Marshal.

2.2.2; ADDRESS SIGNAGE: Project owners shall be responsible for installation and maintenance of all required site, unit, suite, or directory signs. No additional alpha or numeric designators that obscure or are confusing shall be allowed to be posted on the building other than the approved street address and suite numbers.

2.2.2.1 New Construction, Development, or Major Remodels: One or more approved address signs shall be required for every project. Individual buildings shall have the building address numerals, letters, or series of numerals placed a minimum of 7 feet above finish grade or in most cases on the upper 25% of the building face for buildings two or more stories in height. The signs shall be located in such a position so as to be plainly visible and clearly legible from the street and/or road fronting the property or where applicable, the interior access road. The numbers and/or letters shall contrast in color to their background. When buildings have multiple access points from different streets the assigned address shall be posted on, above or adjacent to said access points.

Minimum Numeral and Letter Size

Setback from → Street:	< 50'		50' – 100'		>100'	
	Height	Stroke	Height	Stroke	Height	Stroke
Single Family Residential	4"	½"	N	N	N	N
S.F. driveway/street sign	4"	½"	N	N	N	N
Multi Family	6"	¾"	12"	1 ½"	24"	2 ½"
Small Commercial	6"	¾"	12"	1 ½"	24"	2 ½"
Large Commercial	12"	1 ½"	18"	2"	24"	2 ½"
Monument Sign	6"	¾"	NA	NA	NA	NA

N: Single Family residential, 50 feet or greater from the street, shall have a driveway/street sign, and if the access serves more than one dwelling unit, address signage at the building(s).

2.2.2.1.1 Building units or suites shall be clearly differentiated in an ordered and sequential manner and identified per floor. Numerals designating units or suites shall be a minimum of 3 1/2" high and 3/8" stroke. Said numbers shall contrast with their background. Units or suites that do not face the street from which the building is addressed shall post the building address and suite number on, above or adjacent to the access point for the suite.

2.2.2.1.2 Posting of Multi-story residential units, served by exterior stairways, shall have addresses "stacked" to side of each stairwell.

2.2.2.1.3 Any numbers located on glass surfaces shall have a permanent contrasting background.

2.2.2.1.4 Temporary signs shall be used at the job site as soon as construction begins. Numerals shall be high contrast in color, face the street fronting the property, and be a minimum 12" vs. 6" high.

2.2.2.1.5 All required signs for addressing shall also meet the City of Redmond Planning Department requirements and when required shall be done under the authority of a valid sign permit.

2.2.2.2 **Existing Situations** If in the opinion of the Fire Department the building address is not clearly legible from the street then the building or tenant shall be required to comply with section 2.2 of this Standard.

2.2.3; ADDRESSING PROTOCOLS:

The following protocols shall govern common usage of designators for addressing.

The following is a list of abbreviations, designators and naming conventions, which conform to the US Postal Service and the US Bureau of the Census address standards.

Directional Abbreviations	
East	E
North	N
South	S
West	W
Northeast	NE
Northwest	NW
Southeast	SE
Southwest	SW

Abbreviations for Street Designators

Alley	ALY	Place	PL
Avenue	AVE	Plaza	PLZ
Boulevard	BLVD	Point	PT
Center	CTR	Ridge	RDG
Circle	CIR	River	RIV
Court	CT	Road	RD
Courts	CTS	Shore	SHR
Creek	CRK	Shores	SHRS
Drive	DR	Square	SQ
Estate	EST	Station	STA
Freeway	FRY	Street	ST
Hill	HL	Terrace	TER
Lake	LK	Valley	VLY
Lane	LN	Vista	VIS
Park	PARK	Walk	WALK
Parkway	PKWY	Way	WAY

Secondary Unit Designators

Apartment	APT	Trailer	TRLR
Building	BLDG	Unit	UNIT
Department	DEPT	Lobby	LBBY
Floor	FL	Office	OFC
Room	RM	Space	SPC
Suite	STE	Mezzanine	MEZZ

Address Characters

Capitalize all characters
Omit all punctuation, except the hyphen in the Zip+4 codes
Use abbreviations whenever possible
Use the ST, ND, RD, and the TH after the Numerical Street Names (80TH, 132ND, etc)
All Caps
NO Commas
NO Extra Spaces
NO Hyphens except for the Zip+4 codes

City of Redmond Street Designators

Avondale Road	AVONDALE RD
Bellevue-Redmond Road	BEL RED RD
Brown Street	BROWN ST
Cleveland Street	CLEVELAND ST
East Lake Sammamish Parkway	E LK SAMMAMISH PKWY
Gilman Street	GILMAN ST
Leary Way	LEARY WAY
Union Hill Road	UNION HILL RD
Novelty Hill Road	NOVELTY HILL RD
Old Redmond Road	OLD REDMOND RD
Redmond-Fall City Road	REDMOND WAY
Redmond Way	REDMOND WAY
Redmond-Woodinville Road	REDMOND WOODINVILLE RD
West Lake Sammamish Parkway	W LK SAMMAMISH PKWY
Willows Road	WILLOWS RD

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This document was created by the Natural Resources Division, February 3, 1997.