Application Requirements for **Site Plan Entitlement**

Part 1: Application Instructions

INTAKE PROCEDURE:

Staff will review the submittal package at a pre-submittal meeting to ensure that each item below is included in the application, and that the application is a code compliant application.

The submittal package must be uploaded through the E-Review Portal (http://land.redmond.gov/ereviewportal) prior to the scheduling the pre-submittal meeting. For more information about how to upload electronic documents, please see www.redmond.gov/e-track.

SPECIAL NOTES

The submittal requirements below may change periodically. These submittal requirements are dated **January 2013.**

I. ELECTRONIC PLAN REVIEW SUBMITTAL STANDARDS

Electronic plans that do not meet the requirements below will fail and will result in the application being deemed incomplete and will not be reviewed until complete.

A. File Naming Standards:

Bolded items noted in Sections III, IV, and associated Cover Sheets indicate the naming convention in which the particular submittal must be named. For example, the General Application (Section III) must be named **General Application** and Transportation Plan (Cover Sheet A, II) must be named **Transportation Plan**.

B. Plan Sheet Standards:

All plans must be drawn to scale, as specifically identified in the checklist, and each sheet shall state the scale.

C. Acceptable File Types

Plans: Plans must be submitted in a PDF format.

Documents: Calculations, reports and other supporting documents (non-drawing files) must be uploaded as a PDF.

D. Plan Orientation: All plans must be uploaded in "Landscape" format in the horizontal position.

II. PROFESSIONAL

All components of the application shall be prepared by the appropriate professional(s) licensed in the State of Washington. A license stamp or registration number, whichever is applicable, as well as the signature, shall be provided on the face of the application materials.

III. GENERAL

The applicant shall check each of the following items below to confirm that they are included in the application submittal package:

A. ☐ Completed **General Application Form** and **Project Contact Form**.

B. ☐ **Greenhouse Gas Emissions Worksheet**

C. ☐ Application Fees

D. ☐ If SEPA Determination is required, please see the SEPA Application checklist for submittal requirements.

E. ☐ **Critical Areas Report**, if applicable**,** which contains all applicable information within RZC Appendix 1: Critical Areas Reporting Requirements.

F. ☐ **Design Review Materials**

G. ☐ "**Cover Sheet & Site Plan"**, **"Transportation Plan"**, **"Utility Plan"**, **"Grading Plan"**, and **"Fire Plan"** (which includes all information on Cover Sheet A, attached).

H. ☐ **"Building Elevations"**, **"Floor Plans"**, **"Roof Plans"**, **"Screening Plan"**, and **"Lighting Plans"** (which includes all information on Cover sheet C, attached).

I. ☐ **Irrigation Plan** showing proposed locations and size of irrigation backflow preventers, water meters, and sprinklers.

J. ☐ **Landscape Plan** and **Tree Preservation Plan** as required by Cover Sheet B

K. ☐ **Mitigation Plan**, demonstrating compliance within RZC Appendix 1: Critical Areas Reporting Requirements.

L. ☐ **Noise Study** to analyze current and proposed noise levels as well as methods of attenuation. The study must be conducted by a noise specialist.

M. ☐ **Stormwater Report** prepared by a registered Civil engineer, and shall conform to the standards in the Stormwater Notebook. The report shall contain all information shown in Part 7

N. ☐ **Traffic Study** shall including all information in Part 6.

O. ☐ **Parking Analysis** if required, submit analysis.

P. ☐ **Affordable Housing Agreement** may be required.

Q. ☐ **Phasing Plan** for projects proposed to be phased, please provide a phasing plan identifying the proposed timing of each phase and a clear delineation of those improvements to be constructed for each phase.

R. ☐ **Special Design Requirements** outlining special design requirements for specific districts, neighborhoods or uses.

S. ☐ **Tree Health Assessment** prepared by a certified arborist shall be required for all trees on site that are 6 inches or greater in diameter. The tree health assessment shall also verify that all trees designated as retained are healthy trees.

T. ☐ **Phasing Plan** for projects proposed to be phased, please provide a phasing plan identifying the proposed timing of each phase and a clear delineation of those improvements to be constructed for each phase.

U. ☐ **Public Notice Site Plan** showing the following information on the site plan suitable for public notice:

i. Show proposed project
ii. North Arrow
iii. Street numbers and/or names adjacent to the project boundary
iv. Project Name
v. Identify the boundaries of any critical areas

V. ☐ **Public Notice Tree Preservation Plan** showing the following information on the tree preservation plan suitable for public notice:

i. Show proposed project
ii. Highlight, in the shade of green, trees on the site designated to remain (trees that are NOT being removed)
iii. North Arrow
iv. Street numbers and/or names adjacent to the project boundary
v. Project Name
vi. Show an "X" over each tree proposed to be removed
vii. Include a key stating that the "X" represents trees proposed to be removed.

W. ☐ **Title Report** providing the full title report that is dated within 90 days of the submittal date for all parcels involved.

X. ☐ **Civil Engineering Plan**, **Composite Landscape Plan**, **Composite Site Plan**, and **Composite Utility Plan**

Y. ☐ City Approved Fire Protection System, see Part 8

Z. ☐ City Approved Water and Hydrant System, see Part 9

AA. ☐ Part 10, Staff Approval Signatures

IV. Design Review Board Meeting Materials

The Design Review Board meets at 7PM on the 1st and 3rd Thursday of each month to review land use projects. Please work with your assigned project planner when scheduling a meeting with the Design Review Board.

The following **Design Review Board Materials** must be submitted at least 14 days prior to the Design Review Board meeting.

A. Vicinity map that shows all properties and existing land uses within 500' of the subject property.

B. Statement of Design Intent consistent with the standards set forth in RZC Chapter 21.58 through 21.62, Design Standards. The statement should include text and conceptual drawings and should be based upon a well-defined concept which responds to the community goals and policies identified within Chapter 21.58 through 21.62, Design Standards.

C. Outline all site requirements including front, street, rear and side setbacks, maximum height, maximum lot coverage of structures and/or impervious surface area, maximum FAR/density, minimum and maximum parking spaces and minimum landscaping requirement.

D. Provide site, elevations (including mechanical equipment screening), landscape plans, roof plan, floor plans, lighting plans (including cut sheets and photometrics) and contextual site plans (including existing and proposed buildings and their uses, pedestrian connections, open space areas and parking areas within 100 feet of the subject property).

For new construction or redevelopments, provide perspectives showing proposed structures as viewed from public right-of-way, public trails or other public spaces. Perspectives should also show how the

project relates to neighboring structures.

F. Attach landscape plans. Do not mount on foam board.

G. One set of **colored** site, elevations, perspectives (showing neighboring structures), and landscape plans mounted on foam board. Elevations must show screening of roof top mechanical equipment. These may be provided at the meeting. Mounted set must be least 24”x36” in size.

H. Photos of the subject and adjacent properties keyed to the contextual site plan required in the aforementioned item D. Photos may be provided at the meeting.

I. Final color and material boards to include all significant materials and colors for:

- Exterior Finish (color chips, minimum of 4”x 4”)

- Windows/Frames

- Doors/Frames

- Trim, Flashings, etc.

-Roofing (if visible) and rooftop mechanical equipment screening material.

Material boards must be at least 24”x36” in size. Items must be labeled to correspond with elevation drawing labels.

Final Approval Projects Only

For projects ready for Final Approval, please submit a completed copy of the Design Standards Checklist that demonstrates compliance to Redmond’s Design Standards. Please work with your assigned planner when completing the checklist.

IV. Format

For multi-sheet applications, the engineering site plan, architectural site plan and landscape plan shall all use the same base maps unless prior arrangements have been made.

Additionally, a sheet index must be provided on the face of all plan sets.

A. All plans must make a distinction between existing and proposed features and/or improvements.

B. A sheet index must be provided on the face of all plan sets

C. Applicable contact names, phone, address and e-mail shall be provided on each plan sheet.

D. North Arrow and scale bar must be shown in the same location on each page of the plan sets

E. Each page of the plans set shall include a legend indicating the symbols used on the page (one legend on front of plant set is not acceptable)

F. Provide plans labeled “**Cover Sheet & Site Plan”**, **“Transportation Plan”**, **“Utility Plan”**, **“Grading Plan”**, and **“Fire Plan”** (which includes all information on Cover Sheet A, attached).

G. Provide landscape and tree preservation plans labeled **“Landscape Plan”** and **“Tree Preservation Plan”** (which includes all information on Cover sheet B, attached).

H. Provide building elevations, floor plans, roof plans and lighting plans, labeled **“Building Elevations”**, **“Floor Plans”**, **“Roof Plans”**, **“Screening Plan”**, and **“Lighting Plans”** (which includes all information on Cover sheet C, attached).

I. For large sites, provide a composite site plan, civil engineering plan, composite utility and a composite landscape plan showing the entire site. The plans shall be labeled **“Composite Site Plan”**, **“Civil Engineering Plan”**, **“Composite Utility Plan”**, and **“Composite Landscape Plan”**.

Part 2: Cover Sheet A (Plan Requirements)

Instructions

All plans must be submitted in a **searchable PDF format (non-scanned)**. The plans shall be drawn to an **engineering scale of 1" = 20' or larger** are required and shall be uploaded in landscape format in the horizontal position.

All components of the application shall be prepared by the appropriate professional(s) licensed in the State of Washington. A license stamp or registration number, whichever is applicable, as well as the signature, shall be provided on the face of application materials.

For the subject property and surrounding properties within fifty (50) feet of the subject property unless otherwise noted, including adjacent rights-of-way, the following information shall be shown. These items shall be prepared by a registered Civil engineer in accordance with **City of Redmond Design Standards**, using NAVD 88 vertical datum and NAD 83-91 horizontal datum.

I. Cover Sheet & Site Plan — Section Complete? ☐

General Information

a. ☐ Project Name (show on every page).

b. ☐ Section, Township, Range.

c. ☐ Tax Parcel Number(s).

d. ☐ Legal description and parcel number(s) of the site.

e. ☐ Notation of existing zoning classification.

f. ☐ Small scale vicinity map relating the proposed development to existing streets, other developments and significant land factures within ¼ mile of the subject property.

g. ☐ Name, address, phone number and e-mail address of the owner, developer, builder, surveyor, engineer(s), architect, land planner, arborist and all other professional involved.

h. ☐ Proposed IBC Construction type.

i. ☐ Sheet Index for Plan Set

j. ☐ Site size: gross and net (square feet and acres).

k. ☐ Dwelling units allowed and proposed (residential).

l. ☐ Gross floor area allowed and proposed (non-residential).

m. ☐ Open Space/landscaping required and provided.

n. ☐ Parking required, and provided.

o. ☐ Impervious surface allowed and proposed.

p. ☐ Building height allowed and proposed.

q. ☐ Notation of water and sewer source.

On and off-site Conditions (existing and proposed)

a. ☐ Existing and proposed property lines and lots (including bearings and distances and lot numbers).

b. ☐ Dimensions and ground elevations of existing and proposed structures

c. ☐ Existing topography at 2-foot contours based upon an actual field survey. Larger contour intervals may be allowed on steep sites. Spot elevation of existing and proposed conditions may be shown for flat sites with no more than 5 feet of total elevation change.

d. ☐ Proposed topography including heights of proposed retaining structures and rockeries

e. ☐ Existing and/or proposed easement

f. ☐ Existing and/or proposed public or common use areas.

g. ☐ Fences and other development features.

h. ☐ Distances between existing and proposed structures on and off the subject property.

i. ☐ Existing critical areas including wetlands, stream, 100 year flood plain, geologic hazard areas and critical wildlife areas together with their associated buffers.

j. ☐ Location of any State Shorelines and their associated wetlands. Plans must demonstrate compliance with RZC 21.68, Shoreline Master Program.

k. ☐ If project is within a floodplain, the base flood elevation must be shown using NAD 83-91. If the property contains a FEMA Floodway, it must be shown as well.

l. ☐ All setbacks, including building setbacks and setbacks in accordance with geotechnical recommendations.

II. Transportation Plan — Section Complete? ☐

Onsite Traffic Circulation (including consideration for the following)

a. ☐ Backing zones (away from heavy use areas).

b. ☐ Stacking/queuing of vehicles.

c. ☐ Drop off zones.

d. ☐ Parking areas, including stall delineation and dimensions.

e. ☐ Truck/delivery areas with dimensions and turning radii.

f. ☐ Parking layout (designed by a registered engineer for parking lots exceeding 200 spaces). Page #____

Pedestrian/Transit/Bike Access

a. ☐ Sidewalk locations.

b. ☐ Bike rack locations.

c. ☐ Pedestrian circulation within parking lot.

d. ☐ Pedestrian and/or vehicular connections to adjacent properties.

e. ☐ Public safety features.

f. ☐ Connection from parking to building entrances.

g. ☐ All existing and proposed driveways, intersections and land channelization within 150 of the subject property.

h. ☐ Existing and proposed roadway improvements, including sidewalk, curb and gutter, tapers and street lights within 150 feet of the subject property.

On and Off-Site Conditions within 50 Feet of Subject Property (existing and proposed)

a. ☐ Right-of-way, including bearings and distances.

b. ☐ Streets, edge of pavement or curb, sidewalks, street centerlines, and street names.

c. ☐ Internal public and private streets, including: existing ground to 15 feet beyond the right-of-way line, cul-de-sac length and dimensions, applicable curve data standards (see RZC Appendix 2), required/provided right-of-way, easements, street width(s), typical street section(s), bicycle lane(s), and surfacing.

d. ☐ Frontage improvements, including: right-of-way dedications and easements, typical street section(s), street width(s), sidewalk and planter strip width(s), and bicycle lane(s).

e. ☐ Driveways, including: maximum/minimum width allowed, width provided, all driveways shown within 150 feet of the proposed site, driveway-to-driveway spacing at 150 feet minimum, angle at intersection of street, and emergency access requirements.

f. ☐ Intersections, including: site distance triangles, horizontal alignment, minimum 150 feet offset from near edge of adjacent intersections, approach landings, and minimum curb radius provided.

III. Utility Plan — Section Complete? ☐

Existing and Proposed Utilities

a. ☐ Location and size of water facilities, including water meters and side sewers (Design Standards available at the Permit Center).

b. ☐ Location and size of sanitary sewer facilities (Design Standards available at the Permit Center). Page #____

c. ☐ Location and size of storm sewer facilities. Page #____

d. ☐ Power, power poles, gas, telephone and cable. Page #____

e. ☐ Fire hydrants. Page #____

f. ☐ Vaults. Page #____

g. ☐ Boxes. Page #____

h. ☐ Underground duct runs. Page #____

i. ☐ Location and size of above ground electrical transformers and emergency generators.

j. ☐ Profiles of storm drainage systems are required at locations where construction conflicts are possible. Minimum vertical clearance is 12", except for sanitary sewer where the minimum is 18" (storm drain above sewer). Show existing and proposed grades and utility inverts. Please note that drop structures are only allowed per approval by the Stormwater Engineer. Page #____

k. ☐ New water and sewer mains located within paved areas where reasonably feasible.

l. ☐ Paved access to all sanity sewer manholes is provided with a maximum grade of 18%. Curve radii shall be a minimum of 25 feet inside, 45 feet outside.

m. ☐ Water and sewer mains in easement areas must show 10-foot easement on either side of main. Minimum spacing of 10 feet is required between water and sewer and 5 feet to all other utilities.

n. ☐ Retaining walls, rockeries, and other structures are excluded from utility easement areas.

o. ☐ PRV stations shown where required to create water system pressure zones consistent with the Water System Plan and maintaining pressures less than 100 psi. The PRV stations hall be shown to scale and include adequate area for construction and maintenance as well as vehicular access to in a soft-surface area consistent with City's design and construction standards.

p. ☐ Any required sewage pump stations to service the project must be patterned after the existing City pump stations with preliminary sizing calculations.

q. ☐ Indicate the source of domestic water for all properties within 150 feet of the proposed project and all associated construction.

r. ☐ Submit a hydrogeologist's report of likely impacts to wells serving properties for which the water source has been identified. The report must also include proposed monitoring and mitigation in the event of demonstrated impacts.

s. ☐ Existing trees within 8 feet of new or existing water and sewer mains shall be sown as "removed" on the Tree Preservation Plan.

t. ☐ For utilities proposed to cross critical areas, indicate the proposed means of construction for the crossing and whether a critical areas exemption will be required to be obtained for construction.

u. ☐ The project engineer for the development shall submit a written review of the project to evaluate its compliance with the City's General Sewer Plan. Criteria shall include basin boundaries, service to adjacent properties, the ability to serve all properties within and beyond the development by gravity and the capacity of the sewer system to accommodate the proposed development. If changes are proposed to the General Sewer Plan as part of the development, an application for a General Sewer Plan Amendment shall be submitted prior to or concurrent with the SPE application. Evaluation of the capacity of the sewer system shall rely initially on a review of the data in the General Sewer Plan. Should the General Sewer Plan indicate a capacity problem, physical investigations of the system shall be required which may include inspections of the manholes and videotaping of the sewer mains to determine current system surcharging and system deficiencies as well as flow monitoring to gauge current sewage flows infiltration. Prior to City approval of civil drawings, the project's pro rata share of the cost of any necessary system improvements shall be determined in writing by the Water and Sewer CIP Planning Group and paid by the applicant.

v. ☐ The project for the development shall submit a written review of the project to evaluate its compliance with the City's Water System Plan. Criteria for this review shall include verification of the property water system pressure zone and confirmation that all proposed water services will be within City requirements for water pressure. Acknowledgement shall be made of any fire flow deficiencies and mitigation proposed for the project. Analysis shall be provided of how the existing or proposed water system shall provide redundancy of domestic and fire flows per City standard and industry norms. For projects within the North Redmond neighborhood, written notification from the City that the existing Tolt connection has sufficient remaining capacity to supply the project must be submitted with the preliminary plat application.

IV. Fire Plan — Section Complete? ☐

General Information

a. ☐ General site layout:

i. Property lines.

ii. Adjacent right-of-way (ROW).

iii. Exterior walls of buildings.

iv. Buildings or structures to remain.

v. Labeled location of entry and egress points.

vi. Access roadways.

vii. Surface parking areas.

viii. Loading/unloading/delivery zones.

ix. Locations of fire lane signs and markings.

x. Locations of gate systems, if applicable.

xi. Finished topography at 2-foot intervals.

xii. Designated fire lanes (excluding parking, allow 8' for parking width).

xiii. Turnarounds and overhang areas.

b. ☐ Emergency Vehicle/Operation Areas: 20' x 50'. Page #____

c. ☐ Radii shall be labeled and the driving area of the emergency vehicle access shall be shown in a half tone or similarly. This will coincide with the Emergency Vehicle Access Easement where other than in the right-of-way.

d. ☐ A scalable vicinity map showing the involved parcel(s) and their relation to adjoining parcels, and nearest rights-of-way, overlaid with accurate location of the King County Street grid in one block increments (i.e., 104th Ave. NE, 105th Ave. NE, NE 85th St., NE 86th St., etc.)

e. ☐ Water supply and fire protection features including all: fire hydrant locations, Fire Department Connections (FDCs) labeled for the building served, Post Indicator Valves (PIVs) labeled for the building served, Standpipe Connections (STPCs) labeled with the approximate location of their discharge, and Standpipe Discharge (STPDs). Note: any dry line shall be footnoted with the approximate number of gallons required to fill it.

f. ☐ Indicate the location, size, and material of all underground fire sprinkler system supply piping.

g. ☐ The location of exterior gas meters and notation as to protection.

h. ☐ For commercial or multi-family buildings that are sprinklered, not the location of the direct exterior access door to the Fire Sprinkler Riser Room.

i. ☐ For commercial or multi-family buildings that have a fire alarm system, note the location of the Fire Alarm Panel as being in the riser room and any remote annunciators.

j. ☐ For commercial or multi-family buildings, the approximate location of elevators and stairways in the building and a notation if they do not serve all floors and if they provide access to the roof.

k. ☐ For commercial or multi-family buildings, provide two tables: one showing the gross square footage per floor and total per building and second indicating all Building Code Uses and construction types per building.

l. ☐ Emergency Access Roadway Requirements: Emergency vehicle access roadways are the approved combination of public streets, private streets, private access tracts, and site access roads, lanes, alleys, and designated structures which provide access to Fire Department personnel, vehicles, and equipment for the purpose of providing emergency firefighting, physical and health hazard response, certain systems responses, and emergency medical response to buildings and commercial and residential facilities under all circumstances. This section provides general emergency vehicle access roadway requirements. An emergency vehicle access roadway may be designated as a fire lane for marking purposes

i. Minimum unobstructed surface width shall be 20 feet

ii. Minimum unobstructed height shall be 13'6"

iii. Minimum interior turning radii shall be 25 feet, and exterior turning radii shall be 45 feet

iv. Portions of some turnaround designs shall have a minimum 28-foot interior radius. See Appendix 3 for illustrations.

v. The minimum load bearing surface of an access roadway shall meet the compaction and load bearing requirements of the Engineering Department for a 77,000 pound vehicle and adequate point loading characteristics for both wheel systems and outrigger systems (45,000 lbs over 24"x24" pad)

vi. The surface shall be an all weather driving surface, typically asphalt or concrete (see City Standard Specifications). Alternate surfaces must have the approval from Engineering and the Fire Department.

vii. The access surfaces shall be in place and able to support the weight of Fire Department vehicles prior to the delivery, use, or storage of combustible building materials to or at the site except small amounts used for concrete forms.

viii. Roadways shall be within 150 feet of all portions of the exterior walls of a structure or facility. Courtyards may be required to provide access when designated by the Fire Marshal.

ix. Roadways shall be within 50 feet of 25% of the exterior

x. Dead ends shall be no longer than 150 feet, unless a turnaround is provided to City of Redmond Standards

xi. Fire lanes must be marked per Redmond Fire Department Standards

xii. The emergency vehicle access roadway shall have a maximum grade of 10%. If offsite access grades or on site grades are 10% or more, a design (plan and profile of the proposed roadways must be submitted showing the extent and degree of overage in order to determine if mitigation is possible, and if so, what may be required. If approved, mitigation shall include at a minimum that all structures be fire sprinklered. Additional mitigation may also be necessary.

xiii. Loading and unloading areas are not allowed in Fire Lanes.

xiv. Design of an "Emergency Vehicle Use Only" access must be approved by the Fire Department

xv. Where a gate is desired for an emergency vehicle access roadway they shall be strobe activated electric gates with key and manual overrides, and must have the approval of the Redmond Fire Marshal and the Technical Committee.

xvi. Obstruction of fire lanes for security or other reasons must be approved by the Fire Marshal. Only gate or post systems and locks approved by the Fire Marshal may be used.

xvii. All portions of an emergency vehicle access roadway not in a public right of way, including turnarounds and Emergency Vehicle Operations Areas, shall be maintained in an approved and recorded Emergency Vehicle Access Easement

V. Grading Plan — Section Complete? ☐

General Information

a. ☐ Profiles of existing or proposed road grades in excess of 10 percent.

b. ☐ Provide a grading plan with existing and proposed contour lines at 2-foot intervals.

c. ☐ Designate steep slope areas (40% or steeper and 10-ft. vertical relief or more).

d. ☐ Designate areas with greater than 8 feet of cut and/or fill, adjustment from the Technical Committee required.

e. ☐ Designate retaining walls and rockeries over 8 feet, adjustment from the Technical Committee required.

Stormwater Plan

a. ☐ Proposed underground detention of stormwater facilities must include:

i. Runoff determination per the 2005 Department of Ecology Manual for the design storms as established by the Technical Committee review.

ii. Area draining to the stormwater management system with bypass and compensation areas.

iii. Detention volume computation showing volume required and volume provided.

iv. Inverts showing all pipes entering and leaving control structure or vault.

v. Maintenance vehicle access, which is required to both ends of detention pipes and two access vaults (one near a control structure).

vi. Provision of an easement at a minimum slope of 1:1 from bottom of storm vault or 5 feet, whichever is more. Public storm pipes require a 20-foot minimum easement.

vii. Fire hydrant located within 100 feet of detention pipe systems 4 feet in diameter or larger, and for all vault systems over 1,000 cubic feet of total volume may be required.

b. Infiltration:

i. Soil permeability tests or gradation per the 2005 Department of Ecology Manual. At least two tests must be conducted or one test for every 5,000 square feet of infiltration system bottom area.

ii. Excavation or boring is required in the trench area to a minimum depth of 4 feet below the bottom of the trench. Infiltration is not feasible if there is evidence of groundwater or bedrock/hard pan.

iii. All infiltration systems should be a minimum of 3 feet above the season high water mark, bedrock, hardpan, and impermeable layer for the infiltration bed.

iv. Infiltration should be setback a minimum of 10 feet from NGPEs and property lines as well as 500 feet from drinking water wells and springs, septic tanks, and drain fields.

v. Down spout infiltration systems shall be designed with overall project in mind for typical lots containing individual homes.

vi. Infiltration systems may not be located in an area previously used as a sediment trap.

vii. Inflow to an infiltration system must first pass through a water quality BMP. Disturbed areas shall not drain to the infiltration system.

viii. Maximum trench length of 100 feet.

ix. Provisions are required for the 100-year overflow path.

x. Maximum ponding in an open infiltration basin is 3 feet for the stormwater entering the basin (not to exceed the 100-year, this includes headwaters to pass the stormwater flow out any overflow). 1 foot of free board is required to the top of the structure.

xi. Basin side slopes shall not exceed a 3:1 ratio.

c. Biofiltration (see 2005 Department of Ecology Manual, Volume V, Chapter 9):

i. Required length of 200 feet minimum (may be reduced to 150 feet for redevelopment projects only).

ii. Design high flow bypass for 6-month, 24-hour storm, unless otherwise designated.

iii. Maximum velocity is 1.0 fps for the design storm.

iv. 6% is the maximum swale slope; for slopes greater than 2.5%, check dams must be provided.

v. Setbacks must be provided from buildings or trees within 8 feet of the normal high water.

vi. Vehicle access is required for all biofilters to provide for maintenance.

vii. Cross section showing dimensions, design flow depth, and 1-foot minimum free board.

viii. Swales and trenches are required.

d. Wetpond and detention facilities:

i. Must be setback a minimum of 10 feet away from structures and right-of-way as well as 50 feet away from steep slopes (15% or greater).

ii. The length-to-width ratio must be a minimum of 3.0.

iii. The interior slope maximum is 3H:1V (preferred), 2H:1V below surface is acceptable.

iv. The permanent pool must be designed to a minimum of the 6-month, 2-hour release.

v. Berm embankments may be a maximum of 6 feet high.

vi. The toe of an embankment must be a minimum of 55 feet from the right-of-way.

vii. Emergency overflow for an open pond shall be separated from pond outlet.

viii. 5-foot wide safety bench set at 1-foot depth around the pond perimeter.

ix. Must be multi-celled with a minimum of two cells.

e. ☐ Retaining walls and rockeries shall not cross or be located near storm drain pipes, except where no alternatives exist. Any crossing shall be perpendicular to the wall and implement special construction techniques. Page #____

Part 3: Cover Sheet B (Landscape & Tree Preservation Plans)

All plans must be submitted in a **searchable PDF format (non-scanned)**. The plans shall be drawn to an **engineering scale of 1" = 20' or larger** are required. All components of the application shall be prepared by the appropriate professional(s) licensed in the State of Washington. A license stamp or registration number, whichever is applicable, as well as the signature, shall be provided on the face of application materials.

I. Landscape Plan — Section Complete? ☐

Conceptual Drawing (indicating the following in accordance with RZC Chapter 21.32, Landscaping)

a. ☐ Existing vegetation to be retained.

b. ☐ General location of proposed trees, shrubs and ground cover.

c. ☐ A plant schedule providing the scientific name, common name, size and spacing of each plant as well as specie alternatives for trees, shrub masses and ground cover.

d. ☐ Vegetation for blank screening. Alternatives to blank wall screening/relief could include:

   i. ☐ Material Differentiation

   ii. ☐ Texture Pattern

   iii. ☐ Color Variation.

e. ☐ Parking/vehicle use area screening.

f. ☐ Proposed location and species of replacement trees required. Replacement trees shall be designated as such on the plan and be distinguished from other landscape trees.

Location, Square Footage, Percentage, and Dimensions of Applicable Landscape Areas

a. ☐ Interior parking lot landscaping with computation of vehicle use areas.

b. ☐ Linkage system landscaping - Downtown zone only.

c. ☐ Perimeter landscaping and parking lot perimeter landscaping.

d. ☐ Foundation planting.

e. ☐ Minimum required and proposed site landscaping (percentage).

II. Tree Preservation Plan — Section Complete? ☐

- Preliminary Tree Preservation Plan, labeled **"Tree Preservation Plan"** showing the surveyed location and drip line of all trees four (6) inches or greater in diameter at breast height (4½' above grade) within the site and for fifty (50) feet outside of the site. Individual trees shall be identified by size and species. Page #____
- Where stands of more than twenty-five (25) trees will not be disturbed, the applicant must depict the size and species name of each significant tree, with the drip line of the stand together with a note indicating the total number of significant trees within the stand. Page #____
- Each tree shown must be designated as removed, retained (**no** construction within 5 feet of the drip line), or impacted (trees proposed to remain, but have construction within the drip line or 5 foot drip line setback (only retained trees may be counted toward the 35% tree retention requirement). Page #____

- The five-foot drip-line setback shall also be shown for all trees proposed to be retained and impacted. Page #____
- Location of all proposed water, sewer, and storm lines must be shown.
- A tree health assessment, labeled "Tree Health Assessment" prepared by a certified arborist shall be required for all trees on site that are 6 inches or greater in diameter. The tree health assessment shall also verify that all trees designated as retained are healthy trees.
- **Completion of Tree Preservation Summary Table (Part 5)**.

Part 4: Cover Sheet C (Building Elevations and Floor, Roof, Screening, and Lighting Plans)

Building elevations, floor plans, roof plans, screening plans, and lighting plans shall be **labeled as "Building Elevations", "Floor Plans", "Roof Plans", "Screening Plan"**, and **"Lighting Plans"**. These plans must be submitted in a **searchable PDF format (non-scanned)**. The plans shall be drawn to **architectural scale of 1/8" or 1/4" = 1'**. All components of the application shall be prepared by the appropriate professional(s) licensed in the State of Washington. A license stamp or registration number, whichever is applicable, as well as the signature, shall be provided on the face of application materials.

I. Building Elevations — Section Complete? ☐

Front, Rear, and Side Building Elevations of Proposed Structures (showing proposed colors and materials with shadows to clarify building massing; please review the RZC Chapter 21.58-21.62, Design Standards)

☐ a. Doors and windows.

☐ b. Mechanical equipment and penetrations (including louvers, vents, exhaust fans, meters, etc.).

☐ c. Scuppers and downspouts.

☐ d. Exterior lighting fixtures/surveillance devices.

☐ e. Notes and graphic representation of exterior materials and architectural details.

☐ f. Height of buildings measured in accordance with the definition in RZC.

II. Floor Plans — Section Complete? ☐

☐ a. On-grade floor plans.

☐ b. Upper floor plans (if applicable).

☐ c. Below grade parking plan (if applicable).

III. Roof plans — Section Complete? ☐

Rooftop Mechanical Equipment Screening Details

☐ a. Color.

☐ b. Materials.

☐ c. Height.

☐ d. Sight angles within 500 feet.

IV. Screening Plan — Section Complete? ☐

Dumpster Screening Details

☐ a. Colors, materials, and height.

☐ b. On-grade utility enclosures.

☐ c. Screen type (wall or landscape).

☐ d. Noise attenuation.

V. Lighting Plan — Section Complete? ☐

Exterior Lighting Plans

☐ a. Manufacturer specification sheets, cut sheets or other manufacturer information for all proposed lighting fixtures.

☐ b. The proposed location, mounting height, and aiming point of all exterior lighting fixtures.

☐ c. If building elevations are proposed for illumination, drawings shall be provided for all relevant building elevations showing the fixtures, the portions of the elevations to be illuminated, the luminance levels of the elevations, and the aiming point for any remote lighting fixture.

☐ d. Parking areas.

☐ e. Sidewalks/Pedestrian routes.

☐ f. Foot candle patterns to ensure no off-site glare or "dark" areas (for safety).

☐ g. Exterior signage concept (for commercial and multi-family buildings).

Upon review of the above lighting information, the Technical Committee may request the following

- A brief written narrative with accompanying plan or sketch demonstrating the objectives of the lighting.
- Photometric data, color rendering index (CRI) of all lamps (bulbs), and other descriptive information on the fixtures, and if applicable or required, designation as Illuminating Engineering Society of North America (IESNA) "cut-off" fixtures.
- Computer generated photometric grid showing foot-candle readings every ten feet within the property or site, and ten feet beyond the property lines, at a scales specified by the Technical Committee. Iso-footcandle contour line style plans are also acceptable.
- Landscaping information that indicates mature tree size, shrubbery and other vegetation in order to evaluate the long term and seasonal effectiveness of lighting or screening of lighting.
- Adjacent, existing structures shall also be shown if within 10 feet of property line.

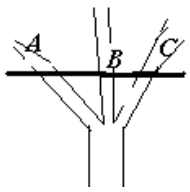
Part 5: Guidelines for Demonstrating Conformance with Tree Protection Standards

Contact: For additional information regarding these guidelines, please contact the City of Redmond's Department of Planning and Community Development at 425.556.2494 or your assigned project planner.

Description: This handout is intended to both summarize tree protection requirements and to provide a sample format for demonstrating compliance with code.

Regulations Summary: The following table summarizes the regulations related to tree preservation in the City of Redmond. For more information, please refer to RZC Chapter 21.32 Landscaping.

Measuring Trees (DBH): *Single-Trunk Trees*. Trees are measured according to their **D**iameter at **B**reast **H**eight, or "DBH". "DBH" is the diameter, measured straight across the tree trunk at 4.5' above grade.

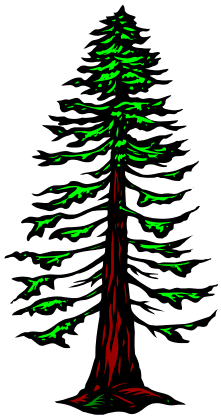


Multi-Trunk Trees. Where trees have more than one trunk or stem at 4.5' and those stems come from the same "base", the DBH for each stem at 4.5' is measured. The DBH is then the **average** of the DBHs of each the stems at 4.5' above the ground.

Example: In the picture to the left, where the horizontal dark line is at 4.5' high, the DBH would be the **average** of the diameters of A, B, & C. So, **DBH = (DBH_A + DBH_B + DBH_C)/3**

	Proposed Action and Brief Definition		
Type of Tree (DBH)	**Removal** (The tree is cut down/removed from the site.)	**Impacted** (The tree is left standing, but ground disturbance is occurring within 5' of the tree's dripline.)	**Retained** (The tree is left standing and ground disturbance is NOT occurring within 5' of the tree's dripline)
Landmark (> 30")	**Prohibited**, unless approved by an exception. A written exception request is required. Mitigation required, i.e. replacement trees at a ratio of 3:1, if exception is approved.	**Prohibited**, unless approved by an exception. A written exception request is required. Preferred over Removal.	**Required for all Landmark Trees,** unless exception is granted.
Significant (6" - 30")	Regardless of the percentage of removed trees, mitigation, i.e. replacement trees at a ratio of 1:1, are required for each removed tree.	Encouraged over Removal.	**35% of all Significant Trees Required.**
Notes	**No more than 65% of healthy Landmark + Significant Trees may be removed,** unless approved by an exception. **If approved, then** mitigation is required, i.e. replacement trees, at a ratio of 3:1 if exception is approved. Tree Replacement Performance Bond required for each replacement tree. 3 year maintenance bond required after performance.	3-year Tree Replacement Performance Bond required for each replacement tree. The bond is used if an impacted tree dies and the applicant does not replace it.	5-year Tree Preservation Bond is required for each Retained Tree. The bond is used if an impacted tree dies and the applicant does not replace it.

Arborist Report: An Arborist Report shall document (1) the trees on site and (2) any off site trees that will be impacted by clearing or other improvements within 5 feet of its drip line. At a minimum, the arborist's report shall:



- Describe the site in narrative and provide an aerial or site plan documenting the locations of tree stands.
- Describe the methodology, which must be considered the best of available science, that was used to rate each and every tree. Describe how trees were tagged in the field.
- Document through a table the following for each tree of 6" or greater in dbh: Tree Number, Species, DBH, Health, Comment on Health, and Proposed Action. The Tree Number is that number that is affixed to the tree in the field and is used to identify it on a surveyed map.
- Provide a surveyed map locating each tree, numbering each tree with its identification number, illustrating each tree's dripline, and illustrating 5' from each tree's dripline. Symbols shall be used and described in a legend to distinguish the following groups: Unhealthy Trees to be Removed, Significant Trees to be Removed, Landmark Trees to be Removed, Significant Trees to be Impacted, Landmark Trees to be Impacted, Significant Trees to be Retained, and Landmark Trees to be Retained.
- Recommend actions for impacted trees and general management, as appropriate.
- Provide a map illustrating the locations of replacement trees.
- Provide an exception request for any proposed action that would not comply with the tree protection standards, such as: removing a healthy landmark tree or having a retained tree count below the required 35%.

Summarizing Compliance with Code: The following table provides you with the format that is required for summarizing a proposal's conformance with the City's tree protection regulations. The table must appear in the Arborist Report and on the Tree Preservation Plan, both of which are part of the application. **Please include the total number of trees that are 6" or greater and the number of unhealthy trees in the report.**

Proposed Action and Brief Definition				
Tree Type	**Removal**	**Impacted**	**Retained**	**Total**
Landmark (>30" dbh)	Number of removed landmark	Number of impacted landmark	Number of retained landmark	Total Landmark Trees
	% of Removed Landmark Trees of All Trees	% of Impacted Landmark Trees of All Trees	% of Retained Landmark Trees of All Trees	% Landmark Trees of All Trees
Significant (6" - 30")	Number of removed significant	Number of Impacted significant	Number of Retained significant	Total Significant Trees
	% significant removed of all significant trees	% Impacted of all significant	% Retained of all significant	% Significant Trees of All Trees
Totals	Number of Landmark + Significant Removed	Number of Landmark + Significant Impacted	Number of Landmark + Significant Retained	Total Number of ALL Trees
	% of removed of all Trees	% of Impacted of all Trees	% of Retained of all trees	
Replacement Trees	# of Replacement Trees	N/A	N/A	# of Replacement Trees

Part 6: Requirements for Traffic Study

PHASE ONE: TRIP GENERATION STUDY/TRAFFIC MODELING

In Phase One of the traffic analysis process, the traffic consultant is required to submit a technical memorandum summarizing the forecasted trip generation for the proposed project, along with justification for the methodology used in the forecast. This memorandum is then reviewed by the City and possibly by other affected public agencies. Upon approval of the trip generation estimate a determination will be made if the project is subject to transportation concurrency review in accordance with section 21.52 of the Redmond Zoning Code. If applicable, the applicant shall submit a request for a certificate of concurrency. The project applicant will be required to pay for the traffic modeling that is part of the concurrency evaluation.

PHASE TWO: FORMAL SCOPING/PREPARATION OF TRAFFIC IMPACT ANALYSIS

Phase Two of the transportation impact analysis process entails scoping of the analysis and preparation of the report by the transportation consultant. Once the traffic modeling is complete, the applicant's consultant should contact the City to set up a meeting to formally scope the transportation impact analysis. The analysis will be based primarily on the outline presented on the following pages. The specific list of intersections that will need to be reviewed in the transportation impact analysis will be developed from the trip assignment for the project. Depending upon the size and character of the proposed project, certain elements of this outline may be reduced in scope or eliminated. However, other items may also be added if special issues relating to transportation exist on the project.

INFORMATION PROVIDED BY THE CITY

Information which is part of the City of Redmond's traffic data base can be found on the City's web site at: http://www.redmond.gov/Transportation/Resources/Engineering/TrafficCounts/ or can be made available to the applicant within one week of a written request to Public Works (contact Public Works at 425.556.2710). Additional information required for the study will need to be acquired at the applicant's expense. The City will provide the following information if it is available:

-Current AWDT information (current shall mean within one year of the study date).
-Current PM peak hour counts (current shall mean within one year of the study date).

I. INTRODUCTION — SECTION COMPLETE? ☐

LOCATION OF PROJECT SITE

a. On local vicinity map.
b. In relation to other major uses or landmarks.
c. In relation to the adjacent street system.

DESCRIPTION OF PROPOSED PROJECT OR ACTION

a. Proposed land use and/or character of project.
b. Size of project (square feet, number of units, number of employees, etc.)
c. Number of parking spaces provided.
d. Number and location of accesses to street system.
e. Anticipated project phasing, if applicable.

SCOPE OF ANALYSIS/ORGANIZATION OF REPORT

a. Specific issues analyzed.

b. General layout of transportation report.

Additional Information Required

_____

_____

II. Existing Conditions — Section Complete? ☐

Definition of Study Area for Analysis

a. All signalized intersections impacted by 20 or more project-generated trips in the PM peak hour (total one-way trips through the intersection).
b. Intersection of site accesses with street system.
c. Non-signalized intersections as directed by the City.

Physical Characteristics of Study Area Street System

a. Streets within study area.
   i. Number of lanes (typical and at intersection).
   ii. Street and shoulder widths.
   iii. Posted speed limit.
   iv. Approximate street grades.
   v. Other geometric features.
b. Non-motorized & transit facilities.
   i. Location of sidewalks and trails within the area.
   ii. Residential projects should identify walk routes to schools within 1 mile radius.
   iii. Location of bike lanes within the area.
   iv. Location of transit facilities within the area.
c. Key intersections in study area.
   i. Traffic Control (signals, signs, etc.).
   ii. Turn restrictions.
   iii. Lane alignment.
   iv. Sight distance restrictions.

Operational Characteristics of Study Area Street System

a. Traffic Volumes.
   i. Average weekday traffic volumes (AWDT) on streets.
   ii. PM peak hour turning movement volumes at key intersections.
   iii. Schematic of street system showing AWDT and PM turning movements.
b. Traffic Operations.
   i. Level of service at all signalized intersections using Circular 212 Critical Volume Sum methodology. Summary table should include level of service ranking from A to F, and critical volume sum for intersection.
   ii. Level of service at all non-signalized intersections using Highway Capacity Manual (Special Report 209). Summary table should include level of service ranking from A to F, and reserve capacity for each critical movement.
   iii. Warrant analysis of non-signalized intersections as determined by the City.
   iv. 85th percentile speed on streets.

Traffic Accident History within Study Area

a. Three-year accident summary at all key intersections. Include accident diagrams.
   i. Intersection accident rates shall be stated in million entering vehicles (MEV) = (annual # of accidents X 106)/ (annual traffic entering)
   ii. Accident rates for street sections shall be stated in million vehicle miles travels (MVM) = (annual # of accidents X 106)/ (annual vehicle-miles of traveled)
   iii. Vehicle-miles = AADT x 365 days/year x section length
b. Identification of problem areas and accident trends.

Parking Demand/Supply

a. Existing location and supply.
b. Existing use characteristics (demand, turnover, etc.).

Additional Information Required

_____

_____

_____

III. Forecasted Conditions — Section Complete? ☐

Forecast of Non-Project Traffic Volumes

a. Forecast year.
   i. Year of project build out.
b. General traffic volume growth.
   i. Annual percentage growth in traffic volumes (typically 2%).
c. Specific traffic volume growth.
   i. Trip generation from other planned developments.
   ii. Diversion of traffic due to planned street improvements.

B. Forecast of Project Generated Traffic Volumes

a. Trip Generation
   i. ITE Trip Generation (7th Edition) or City approved methodology.
   ii. Breakdown of new, pass-by and diverted trips.
b. Mode Split
   i. Proportion of trips via SOV, HOV, walking, bicycle, or other modes.
c. Trip Assignment
   i. Assignment of project trips to specific travel routes as per the short-term trip assignment provided by the City of Redmond traffic model (if used for concurrency testing).
   ii. Show all streets and intersections impacted by 20 or more trips in the PM Peak Hour. Show other intersections as directed by the City.

C. Analysis of Forecast Year Traffic Operations With and Without Project

a. Level of Service
   i. All signalized intersections using Circular 212 Critical Volume Sum methodology. Summary table should include level of service ranking from A to F, and critical volume sum for intersection.

ii. All non-signalized intersections using Highway Capacity Manual (Special Report 209). Summary table should include level of service ranking from A to F, and reserve capacity for each critical movement.
iii. All project accesses to street system using applicable methodology outlined above.
iv. Schematic of street system showing AWDT and PM turning movements.

b. Project Specific Mitigation: Use the following guidelines in determining whether mitigation is required at specific intersections:
   i. If the intersection will operate at LOS-D or better in the forecasted year with the proposed project, no mitigation is required.
   ii. If the intersection will operate at LOS-E/F in the forecasted year with the proposed project, and the addition of the project traffic decreases the LOS, mitigation may be required to alleviate project impacts. For signalized intersections, the consultant should then use the HCM 209 methodology to assess potential physical improvements to improve the operation of the impacted intersection. The City will review these potential improvements and may require their construction to mitigate project impacts.

Safety Condition within Study Area

a. Analysis of safety problems identified in Existing Conditions section.
b. Residential projects should coordinate with the City and Lake Washington School District to identify gaps or hazards for school walk routes.
c. Options available to reduce or eliminate safety problems.
d. Analysis of entering and stopping sight distance at project accesses and along street frontage(s).

   Note: The design speed is used in any analysis shall be 10 mph over the posted speed limit unless otherwise approved by the City.

Parking Demand/Supply

a. Proposed parking supply.
b. Analysis of expected parking demand.
   i. ITE Parking Generation (2nd Edition) or City approved methodology.
c. Comparison of supply/demand to City Code Requirements.

Additional Information Required

_____

_____

IV. Summary of Analysis and Mitigation — Section Complete? ☐

Executive Summary of Transportation Impact Analysis

Summary of Impacts and Project Specific Mitigation

Part 7: Requirements for Preliminary Stormwater Report

The Preliminary Stormwater Report must follow the format provided in the 2012 Department of Ecology Stormwater Manual for Western Washington.

I. REPORT COMPONENTS	SECTION COMPLETE? ☐

a. Describe the proposed development. Page # ____
b. State how the site currently drains. Page # ____
c. Provide a brief description of the downstream conveyance system. Page # ____
d. Include a Drainage Basin Map with the following:
    i. North arrow.
    ii. Scale (larger engineering scale may be used where appropriate).
    iii. Title block.
    iv. Property lines.
    v. Proposed and existing contours.
    vi. Proposed storm drainage inlets.
    vii. Existing storm drainage.
    viii. Drainage area to SWM Facility.
    ix. Off-site areas draining on-site.
    x. Flow path for time of concentration computations.
    xi. Legend of symbols.
    xii. Road and stream names. Page # ____
e. Drainage calculations:
    i. Rainfall intensity (KCSWM Manual Fig. 3.5.1C-3.5.1I).
        - 6-month, 25-hour. Page # ____
    ii. Pre-developed conditions:
        - Pervious area.
        - Pervious area land use.
        - Impervious area.
        - Impervious area land use.
        - Drainage calculation results. Page # ____
    iii. Post-developed conditions:
        - Pervious area.
        - Pervious area land use.
        - Impervious area.
        - Impervious area land use.
        - Drainage calculation results. Page # ____
f. Quantity control:
    i. Release rate(s) half of previous 2 yr. for post 2 yr., pre 10 yr. for post 10 yr., and pre 50 yr. for post 50 yr.
    ii. Storage volume required.
    iii. Storage volume provided.
    iv. Quantity control facilities. Page # ____
g. Quality control:
    i. Water quality volume required (6-month, 24-hour).
    ii. Treatment volume provided.
    iii. Quality control facilities. Page # ____

Part 8: Required Fire Systems

1. An approved fire alarm system will be required for one or more of the following reasons:
   - -An approved alarm panel and means of transmission is required for monitoring of the sprinkler system
   - -New buildings 3000 gross square feet or more(unless R-3 single family) require an approved fire alarm system
   - -Existing buildings 6000 gross square feet or more (unless existing R-1) require an approved fire alarm system
   - -Special hazards, occupancies or situations may also require an approved fire alarm system
   - -Hood and duct extinguishing systems shall be supervised and monitored as a separate zone by the alarm system.
   - -Duct detectors shall be supervised on a separate supervisory zone.
   - -An alarm system may be required, in concert with other fire protection systems, by the Fire Marshal as mitigation for substandard conditions
   - -Single station smoke detection is required in all residential occupancies.
2. An approved automatic fire sprinkler system will be required for one or more of the following reasons:
   - -Buildings with gross square footage of 3,000 square feet or more
   - -All residential occupancies built under the IBC
   - -Any building with a calculated occupant load over 200 with an assembly occupancy
   - -Access grades 10% or greater to or within a project site may require mitigation that will include a requirement for an approved fire sprinkler system in every building.
   - -Where calculated fire flow demand for a non sprinklered building exceeds the available water or exceeds 3500 gpm.
   - -Certain hazardous occupancies and/or storage situations require an approved fire sprinkler system
   - -Commercial additions where the structure after the addition exceeds 5000 gross square feet require an approved fire sprinkler system.
3. Standpipes shall be installed as directed and in conformance with Redmond Fire Department Standards.
   - -Interior standpipes are required per the IBC, in large buildings, in buildings of 3 stories or more, as part of mitigation for a deficiency in other required fire protection, or as directed by the Fire Department.
   - -Exterior standpipes may be required when vehicles access is impossible or inadvisable in the opinion of the Fire Department and an exterior supply is needed.

Part 9: City Approved Water Supply and Hydrants

City approved water supply and hydrants

i. Water System improvements shall be consistent with the City of Redmond Water Plan
ii. Residential areas shall be master planned to provide a minimum of 1500 gpm
iii. Most commercial areas shall be master planned to provide a minimum 3500 gpm
iv. Hydrants must be capable of providing sufficient fire flow to meet the required flow of the project as calculated by the Fire Marshal
v. Any one hydrant shall be capable of providing a minimum of 1500 gpm and any two or three hydrants (depending upon demand) flowing simultaneously shall be capable of providing the demand flow.
vi. A fire flow report may be required. This report may consist of:
   -Results of a functional flow test performed by a fire protection consultant.
   -The test shall record pitot guage readings for all ports opened, flow calculations for each port flowed, static and residual pressure readings, location of the test (identify specific hydrants used and what each was used for), calculated flow at 20 psi residual, and a flow graph
   -A hydraulically modeled fire flow estimate from the City of Redmond Water Utility. This flow estimate shall be the gallons per minute available at 20 psi residual for the maximum instantaneous peak.
   -The water pressure zone(s) shall be identified. Any peculiarities of the water supply system at the location should also be noted.
vii. Hydrants shall be located in relation to the building or area they serve.
viii. The Fire Marshal may consider existing hydrants within 300 feet of a single family residential project as providing some portion of coverage.
ix. Maximum hydrant spacing is 300 feet on center for commercial, multi-family, or single family residential 6,000 square feet or more.
x. Maximum hydrant spacing is 600 feet on center for surface parking lots, and single-family residential 6000 square feet or more.
xi. Where structures on a dead end street access are over 150 feet from a hydrant, an additional hydrant may be required within 150 feet and placed in relation to the overall development and existing hydrant layout.
xii. Proposed hydrant and FDC locations and existing hydrant locations shall be shown. Hydrant locations must be coordinated with and approved by both the water supplier and the Redmond Fire Department
xiii. Hydrants shall be no closer than 12' to a carport, garage, building or dumpster. Planter islands or peninsulas for hydrants require a minimum diameter of 8 feet. Four feet is to be maintained between face of curbs and fire protection equipment and if applicable between hydrants, FDCs and PIVs. If closer to the curb, approved protective posts are required.
xiv. Hydrants, FDCs and PIVs should be a minimum of 40 feet from other structures and on the opposite side of the access from the building they serve, unless approved otherwise.
xv. FDCs and PIVs shall be located adjacent to a hydrant, unless approved otherwise.
xvi. Bollards are required around natural gas meters if the driving surface is within 20 feet. Placement shall be per Redmond Fire Department Standards

Part 10: Staff Approval for Scheduling Formal Application Intake Meeting for PREP Project (to be completed by City review staff)

This form is to be completed at the end of the PREP process. Upon completion of this form by the City review staff, the applicant may schedule a pre-submittal or intake appointment by contacting your project planner. The applicant must bring this form (original) to the appointment to bypass the review for completion. In order to ensure a smooth intake process, please have your filing fees estimated by a Planner prior to your appointment. Please note this form is NOT required for submittal of plans for a PREP Kick-Off Meeting. Please refer the PREP Kick-Off Meeting Form if you are just beginning PREP.

The following project has been reviewed for completeness of the PREP submittal requirements and may be accepted by the Development Services Center:

Project Name:_____

Project #_____

LAND #_____

Review Group	Signature of Reviewer
Engineering/Transportation:	
Planning:	
Stormwater/Clearing and Grading:	
Water/Sewer:	
Fire:	