

#### CITY OF REDMOND

# DEVELOPMENT ENGINEERING & CONSTRUCTION DIVISION FREQUENTLY ASKED ENGINEERING QUESTIONS

#### **General Questions**

### How long will it take to get my construction plans approved?

Review of final construction plans begins after Land Use approval conditions are issued. Each City review cycle is 28 days. If the plan set submitted is complete and addresses all conditions of approval, and any comments are addressed in a timely manner plans can typically be approved for construction in approximately 4 months. Time may be shorter for a very simple project, or longer if there are significant issues to be resolved, or delays in resubmittal of the plans or extensive review comments due to plan submittals that are incomplete or not in compliance with City codes and design requirements.

#### How much will it cost to get my construction plans approved?

Plan review and inspection fees are included in the **Development Engineering & Construction Inspections Fees** sheet, Fee Schedule (A-Z) - City of Redmond

#### Where do I find your engineering design requirements?

Transportation design standards are described in Appendix 2 of the Redmond Zoning Code,

http://www.zoningplus.com/regs/redmond/index.aspx?Nav=browse&index=4222&key words=Appendix+2.

Water and Utility design standards are in Appendix 3, <a href="http://www.zoningplus.com/regs/redmond/codetext.aspx?section=009.003&mode=1">http://www.zoningplus.com/regs/redmond/codetext.aspx?section=009.003&mode=1</a>.

Stormwater design standards are in the <u>Stormwater, Clearing and Grading Technical</u> <u>Notebook</u>. In addition, City design details and specifications are in the <u>City of Redmond</u> Standard Specifications and Details.

#### How do I request a design deviation?

Administrative Deviation requests are required for any proposed improvements that do not meet City standards. The request should be in writing and include the design standard, a description of the proposed deviation, and the reason the City should consider granting a deviation. The City's Technical Committee (consisting of the Planning Director, Public Works Director, and others) makes the decision to grant a design deviation.

Administrative Engineering Deviation - City of Redmond

#### **Water and Sewer**

### What is the water pressure at my site?

This is based on the pressure zone the site is located in. Redmond has more than ten pressure zones. They are shown on the water system map in the Water System Plan (call 425-556-2873 to obtain a copy of the Water System Plan) and on the water system maps (located at the Development Services Center counter). The site water pressure can be calculated by taking the HGL (hydraulic grade line) shown on the maps in feet, subtracting the ground elevation and converting the result to psi by dividing the result be 2.31.

#### What is the available fire flow with residual pressure at my property?

Single family fire flow availability in most residential neighborhoods is 1,500 gpm; however we do have some areas that have less available flow. Residual pressure is 20 psi. Commercial and multi-family areas require 3,500 gpm and most areas have this. The 300 zone in S.E. Redmond is limited to 2,500 gpm due to pump station limitations. The City utility engineers can determine if your project site has adequate fireflow based on the size of the existing pipe network serving the site.

# Where are the water and sewer mains in the street serving my property and what are they made of?

Information regarding existing water and sewer systems is shown in the mapbooks available at the front counter of the Development Services Center.

#### What size water meter will I need for my project?

Single family residences usually require a 1" meter to provide domestic and fire service. Commercial and multifamily structure meter size is determined by the mechanical designer for the project based on the fixture units in the building.

#### What size of side sewer will I need for my project?

A 6" diameter side sewer is adequate for most projects. Some larger buildings may need an 8" diameter side sewer. This is generally determined by the mechanical designer for the project.

#### Do I owe latecomers fees?

City staff can determine if latecomers fees apply to your site. This information should also show up in your title report for the property.

### Stormwater, Clearing and Grading

# Do I need to provide on-site detention and water quality treatment facilities for my project?

Projects adding 5,000 s.f. or more of impervious surface are required to provide flow control. For projects adding between 5,000 and 10,000 s.f. of impervious surface this may be accomplished using on-site stormwater management techniques in lieu of formal detention. Projects adding 10,000 s.f. or more impervious, or 5,000 s.f. or more where on-site stormwater management is infeasible, are required to provide formal detention.

Any project adding 5,000 s.f. or more pollution generating impervious surface is required to provide water quality treatment.

#### What design manual do you use in Redmond?

Redmond uses the 2005 Department of Ecology Stormwater Management Manual for Western Washington, as modified by the 2012 City of Redmond Stormwater, Clearing and Grading Technical Note.

#### Can I infiltrate runoff on my site?

Infiltration of runoff from non-pollution generating surfaces is encouraged throughout the City. Infiltration of runoff from pollution generating surfaces is limited in Wellhead Protection Zones 1, 2, and 3. Please refer to the <u>City Stormwater Technical Notebook</u> for further detail.

#### Can I pay a fee-in-lieu of providing a stormwater system on-site?

Properties within the City Center and Overlake regional surcharge areas are eligible to pay a fee-in-lieu of permanent on-site detention and water quality treatment. In some cases interim detention facilities will be required until the regional facilities are online. Part of the Overlake surcharge area requires on-site water quality treatment prior to discharge to the regional system. Please contact the Stormwater Engineer at (425) 556-2890 or (425) 556-2758 for specifics on your project site. Sites outside the regional surcharge areas may be considered for fee-in-lieu of detention or water quality on a very limited basis.

#### Do I have to pay a fee-in-lieu if I would rather build a system on-site?

If your project is in a regional surcharge area, and does not drain directly to the Sammamish River through a private outfall, you are required to participate in the regional facility program unless site specific conditions prevent you from utilizing the regional system.

### Does Redmond have restrictions on working during the rainy season?

Redmond has limitations on work allowed between October 1<sup>st</sup> and April 30<sup>th</sup>. Some projects are not allowed to work during the rainy season, while others may move forward with an approved Wet Weather Plan showing adequate erosion control for rainy season work.

#### **Engineering/Transportation**

#### Is a traffic study required?

A completed concurrency application is required for all developments. Typically, if the project generates less than 30 pm peak hour trips, no traffic study is required unless there are specific operational concerns in the immediate vicinity of the project such as access. If the project generates more than 30 pm peak hour trips a Phase I study is required. Depending on the results of the Phase I study, additional analysis may be required in the Phase II study.

#### Please explain the differences between a Phase I and Phase II traffic study.

A Phase I traffic study includes the completed concurrency application as well as a technical memo that summarizes the forecasted trip generation for the proposed project.

Depending on the results of the Phase I study, a full Traffic Impact Analysis is required as the Phase II study. The applicant's traffic engineer should contact the City to develop the scope of the analysis.

#### What street improvements are required?

Street improvements depend on existing conditions. Generally, improvements consist of constructing ½ street improvements that may include curb, gutter, planter strip, sidewalks, storm drainage, street lights, and undergrounding overhead utilities.

#### What about dedications and easements?

Dedication and easement requirements vary by project, but generally include a 10' easement for sidewalks and dry utilities. The 10' is usually measured from the back of the right-of-way. Right of way dedications are required for new public streets and may be required along arterial streets.

# What is required for street lighting—who does the design—what information needs to be shown on the plans?

The applicant must evaluate the existing street lighting system to determine if current lighting standards are met. If the current standards are met, the applicant must submit analysis documentation that demonstrates this. If current standards are not met, the applicant must propose a design that meets City standards. Unless otherwise specified, streetlights on arterials are City-owned and maintained and require a streetlight design plan that is approved by the City. Further information is available in the <a href="City's Street">City's Street</a> <a href="Light Design Manual">Light Design Manual</a>. Streetlights on local streets are PSE/Intolight-owned and maintained systems. Contact PSE for design.

## Which overhead utilities need to be undergrounded?

Undergrounding requirements vary by site - generally all overhead utilities need to be placed underground across the property frontage and within the development.

#### What are sight distance triangles and where do they need to be shown?

Sight distance triangles help ensure that motorists can see clearly and safely at intersections and driveways. They need to be shown on the plans in these locations. The area encompassed by the triangle must be clear of obstructions between 2' and 8' above the ground. The dimensions of these triangles vary depending on the classification of the street and are described in Section 21.52.040 of the Redmond Zoning Code,

http://www.zoningplus.com/regs/redmond/index.aspx?Nav=browse&index=4109&key words=Sight+Clearance+

#### What about access—where can we access our property?

Access is determined depending on specific property constraints. Generally access is set at a location that maximizes sight distance and safety and minimizes potential conflicts with other motorists and pedestrians. Where a property abuts multiple streets, the access is to be taken from the lower classification street.