

CHAPTER 6: LARGE PROJECT REQUIREMENTS

6.1 Project Classification

See Chapter 3 for project classification.

6.2 Project Requirements for Large Projects

Large Projects are required to meet Minimum Requirements #1 through #10 of the 2005 Ecology Manual. Note that Chapter 2 of the Stormwater Notebook amends some of those requirements. There are also more strenuous requirements for construction stormwater pollution prevention outlined in Chapters 9 and 10 of the Stormwater Notebook.

6.3 Permit Process for Large Projects

The following is an overview of the steps and requirements for projects that require only a Clearing/Grading and Stormwater Management approval (and no other approvals). Projects requiring other permits may have additional steps and requirements. Consult the Development Services Center for additional guidance.

Table 6: Large Project Requirements	
Responsible Party	Activity
Applicant	I. Project Proposal A. <u>Prepare Project Plans</u> – an Application Checklist for Project Plan preparation is found in Appendix F. B. Prepare SEPA Checklist <ol style="list-style-type: none">1. All Large Projects are required to submit a SEPA Checklist. The Technical Committee will determine if the proposed activity requires formal SEPA process review.2. SEPA Checklists are available at the Development Services Center. Redmond has modified the state standard checklist. Therefore, only a City of Redmond SEPA Checklist will be accepted. Complete the checklist to the best of your ability.

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Applicant	<p>II. Complete and Submit Applications</p> <p>All the following shall be completed and submitted for review for the application to be considered complete. Only complete applications will be processed.</p> <ul style="list-style-type: none"> A. One (1) copy of a completed General Application Form (found in Appendix D of the Stormwater Notebook, also available at the Development Services Center) B. Eight (8) sets of Project Plans including the applicable information on the application requirements checklist in Chapter 10. C. Submit nine (9) copies of the SEPA document(s). D. Application fee.
City	<p>III. City Review Process</p> <p>All Large Projects are processed through the Technical Committee. The Committee reviews the proposed project in concept and makes the SEPA determination. The Committee prepares a letter of conditions to be addressed during preparation of final construction drawings.</p>
Applicant	<p>IV. Construction Plan Preparation</p> <ul style="list-style-type: none"> A. Prepare construction drawings based on the letter containing the conditions of approval from the Technical Committee and on Redmond's design standards (see Chapters 4 through 7). B. Submit three (3) sets of revised plans and supporting calculations to the Development Services Center (include a copy of the Technical Committee letter of conditions). C. Pay construction drawing review fee at the Development Services Center.
City	<p>V. Construction Plan Review</p> <ul style="list-style-type: none"> A. Plans are reviewed in house and with City's contracted consultant. B. The project engineer or applicant will be contacted when the review is complete. C. The plans and computations are red-lined and one (1) set of each is returned to the applicant with a Plan Review Checklist completed by the City.

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Responsible Party	Activity
Applicant	<p>VI. Revision and Resubmittal</p> <p>A. Revise plans per the City's comments. B. Resubmit the last set of red-lined prints and computations, the Plan Review Checklist and three (3) sets of revised plans and computations.</p>
City	<p>VII. Review of Revised Plans</p> <p>A. Once all comments have been satisfactorily addressed, the City will proceed with plan approval. B. The project engineer or applicant will be contacted.</p>
Applicant	<p>VIII. Submit Original Plans for City Approval</p> <p>Submit original plans to the City for approval along with the final the calculations/report that accurately describes the drainage system and function. Plans shall be reproducible Mylar.</p>
City	<p>IX. Plan Approval</p> <p>Appropriate City staff sign plans and returns them to applicant or engineer.</p>
Applicant	<p>X. Submittal of Permit Prints</p> <p>For Clear and Grade Applications only: Submit six (6) sets of prints prepared from the signed plans to the Stormwater Engineer.</p> <p>Otherwise, submit prints to Engineering Division.</p>
City	<p>XI. Permit Preparation and Plan Distribution</p> <p>For Clear and Grade Applications: The Stormwater Engineer completes the permit, signs it, calculates the remaining fee, and determines bonds. The completed package is sent to the Development Services Center. The project engineer or applicant will be contacted by the Development Services Center when the permit is ready.</p>
Applicant	<p>XII. Obtain Permit</p> <p>When applicant is notified that the Permit is ready to issue, Applicant needs to come to the Development Services Center and:</p> <p>A. Pay any remaining fees and post required bonds, and B. Sign for and receive the permit.</p>

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Responsible Party	Activity
Applicant	<p>XIII. Pre-Construction Meetings</p> <p>After plan approval and after submitting permit prints, applicant shall contact the Construction Division and schedule a Pre-Construction Meeting. Contact the Construction Division at (425)556-2723 for the date, time, and location (the inspector may have the meeting at the site). <u>In addition to permit issuance, construction may not begin before having a Pre-Construction Meeting.</u></p>
Applicant	<p>XIV. Construction</p> <p>The applicant shall complete all activities identified in the approved plans to meet City of Redmond standards. As items are completed, and at appropriate times during construction (i.e. before utilities are buried) the applicant shall notify the City Inspector assigned to the project at the Preconstruction Conference that elements are ready for inspection. Failure to notify the City of readiness for inspection in a timely manner may result in the requirement to remove and replace buried or hidden elements.</p>
City	<p>XV. Release of Performance Bonds</p> <p>Performance bonds remain in full force and effect until 1) the obligations secured are fully performed to the satisfaction of the City's inspectors; 2) a bond guaranteeing maintenance of all improvements for a guarantee period have been submitted to the City; and 3) the City has released the bonds in writing.</p>
City	<p>XVI. Cancellation of Non-Issued Permits</p> <p>A. The permit is only valid for a designated time. It may be to the applicant's benefit to wait until construction is ready to begin before picking up the permit.</p> <p>B. The permit will be held for six (6) months without issuance (unless specifically stated otherwise in the conditions of approval) but will then be nullified after this period if not picked up. The permit application would have to be started again, from the beginning, if the project is still desired.</p>

Table 6: Large Project Requirements	
Responsible Party	Activity
Applicant	<p>XVII. Permit Extension Request – (Optional)</p> <p>A. If the proposed work cannot be completed within the time covered by the permit an extension may be granted. Additional fees for inspection and renewal are required for extension.</p> <p>B. <u>The applicant must submit a written extension request to the Development Services Center at least two (2) working days before the expiration of the permit.</u></p>

6.4 Fees for Large Projects

Fees are charged for plan review and City inspection. Appendix E includes the Schedule of Public Works Fees that was current at the time the Stormwater Notebook was published. Updates are available from the Development Services Center.

Large project fees often include but are not limited to:

- Large Projects: review
- Large Projects: Inspection

There may be additional review fees related to project-specific items. For example, vaults must be designed for appropriate soil, groundwater, and surface loadings. Separate review and permits are required from the Building Department. Consult the Development Services Center to determine what actual costs you can expect based on the specifics of your project.

Performance security may be required prior to issuance of a permit. Security requirements are determined after application.

6.5 Project Submittal

These application requirements are for Regulated Activities (Chapter 15.24 of the Redmond Municipal Code) and may also require Building Permit review, Site Plan review, or Subdivision review. Other plan requirements may also apply. Consult the Stormwater Engineer prior to submittals for specific information.

A. Existing Conditions

1. Plan at 1"=20' scale showing proposed activity (other scales may be approved by the Stormwater Engineer).

2. Plan size – 22"x34" – if possible show entire site in one (1) drawing (offsite area must be shown if drainage from it will be diverted or if it will drain to a sediment control feature onsite). If the area is too large to fit on one (1) 22"x34" sheet then break site into logical sections with matchlines. Provide a composite plan at a smaller scale that shows the matchline breaks and page numbers.
3. Owner Information – name, address, and contact: add to plan title sheet.
4. Project and Site Information – title, tax parcel or plat number, site area, disturbed area, and impervious area both existing and proposed.
5. Vertical Datum – must use 1990 City of Redmond datum (contact Development Services Division for specific details).
6. Written description outlining proposed activity.
7. Existing property lines (include bearings and distances).
8. Existing contours – 2-foot contour interval (information may be available from the City), use dashed lines.
9. Existing utilities – identify type and size (use screened lines or dashed lines).
10. Slope analysis – identify slopes 15% to 25%, 25% to 40%, and slopes greater than 40%. The slope analysis must clearly show the relationship of the slope to the proposed improvements.
11. Locations and drip lines of trees 6-inch diameter or greater (measured 4 feet above existing grade. (Only those trees to be cleared or trees within 50 feet of cleared areas need to be specifically designated.)
12. Roadways – existing (label name/number and identify public or private).
13. Existing surface waters (Streams, Lakes, Wetlands, etc.)
14. All required onsite information shall extend onto the adjacent property within 50 feet of site and any offsite area that drains onsite.
15. Identify source of survey information, date surveyed, surveyor, etc.
16. Provide a low impact development site assessment (see Chapter 8) if applicable.

B. Proposed Activity

1. Proposed retaining walls/rockeries (label approximate height).
2. Proposed contours – use solid lines; show connection to existing contours.
3. Proposed utilities – identify type and size and provide calculations for preliminary sizing.
4. Stormwater profile - Profiles shall be included for public streets and for easements that contain public storm drain systems. Profiles may be **required** for non-public areas **as determined by the Stormwater Engineer**. Profiles for the public streets and easements are to be included on the same sheet as the plan unless agreed otherwise by the Stormwater Engineer. Structure callouts in the profile shall include structure number, stationing, type, size, and compass locations of penetrations, and shall be shown complete for each structure shown on the plans. Structure callouts in the plan view shall include structure number, type, and size.
5. Approximate quantities of cuts and fills (in cubic feet).
6. Proposed roadways, if any.
7. Standard Notes (Appendix L).
8. Proposed retaining walls/rockeries (label approximate height).

C. Stormwater Detention / Water Quality Facility Data

1. Facility Type: _____
2. Live Storage (Detention) Volume: _____
3. Emergency Overflow Elev: _____
4. Dead Storage (Water Quality) Volume: _____
5. Pond Outlet Invert Elev: _____
6. Liner / Bottom Type: _____
7. Drain ? : Yes/No
8. Water Quality Type: _____

Notes about Stormwater Facility Data:

1. Facility type: pond, vault, tank, other
2. If there is no live storage, or no dead storage, fill in the blank with "N/A"
3. Liner / Bottom type should be descriptive. Examples include: 45 mil PVC Geomembrane, GCL, six-inches compacted clay, 12-inches compacted till, or if no liner then say, "infiltration" For concrete vault, say "concrete vault". For tanks, identify pipe material.

6.6 Construction Documents

The stormwater standards for the Construction Documents are as follows. All plans and documents must be prepared by a Registered Professional Engineer with experience in the applicable discipline and bear the appropriate stamp(s), date(s), and signature(s).

6.6.1 Provide Sufficient Construction Information

Sufficient information must be shown on construction documents to define and provide for construction of the work as designed. Construction documents (e.g., plans) must be clearly readable and show consistency between calculations and plans. The design concepts, calculations, and construction documents must clearly and explicitly show that all codes, standards, and approval conditions have been addressed. The designs must also be consistent with environmental documents and must reasonably minimize adverse impacts as specified in the project's environmental review.

6.6.2 Grading

Show existing and proposed lay of the land. Contours shall use the City of Redmond datum. The contour interval shall be based on the slope of the land. The contour interval is 2 foot for most sites; 5 foot may be used for steep slopes; and 1-foot intervals may be used if required by or approved by the Stormwater Engineer. For very flat sites spot elevations shall be provided. If part of the site is flat, provide a combination of contours and spot elevations. Proposed contours must not create undrained, ponding areas where such areas would not be appropriate (onsite or offsite). Contours of the same elevation beside each other must have high or low-spot elevations between them. Grading of swales must be shown. If contours are not closer together than 50 feet, spot elevations every 50 feet are required. Also, spot elevations are required at the beginning and end of the swale.

6.6.3 Outline the Construction Sequence

The construction sequence, including temporary erosion and sediment control must be outlined on the drawings. This sequence must be technically sound and feasible.

6.6.4 Check Specific Project Requirements

Make sure proposed construction meets the commitments and requirements in project documents such as SEPA Checklists (EIS, if done for the project), site plan approval conditions, special permits, and other such project documents.

6.6.5 Use the Checklists

The Plan Review Checklist, in Appendix F of the Stormwater Notebook, contains very detailed lists of items that are expected to be on project plans. For the initial application, many details can be omitted. For construction drawings, all applicable details need to be included.

6.6.6 Other Permits

Make sure proposed construction meets the commitments and requirements in project documents such as SEPA Checklists (EIS, if done for the project), site plan approvals, special permits, and other such project documents.

6.6.7 Include Basic Information Regarding the Project

The lead sheet (at a minimum) should identify the property (tax lot, address, vicinity map) and summarize information related to monthly billing credits (total square feet area of tax lot(s) comprising the project, square feet of proposed impervious area, water quantity control design storm(s), water quality facilities, and the design storm for each facility).

6.6.8 Provide Accurate As-built Drawings

As-built records of the storm drainage system are maintained by the City. Help make sure the records are correct when project information is provided by submitting accurate as-built drawings when a project is completed. Before acceptance of improvements an as-built plan shall be prepared by a Professional Land Surveyor or Civil Engineer, licensed in the State of Washington. The as-built plan shall include accurate locations, elevations, and sizes of all constructed features. As-built documents will bear the signature, stamp, and date of the licensed Land Surveyor preparing them. Visit the Development Services Center for a description of the as-built process.

6.7 Rough Grading Permits

Rough grading is the stage at which the grade is modified to conform approximately to the proposed final grade. This permit usually covers only earthwork but may also include stormwater systems especially if they are part of the pollution prevention

system. It is a prelude to further work on a development proposal that has received conceptual approval from the City.

The Rough Grading Permit Application is shown in Appendix G. It may be copied or picked up at the Development Services Center. Submit eight (8) sets of the grading and TESC plans with the permit application for review if they have not already received City approval. After the plans are approved submit ten (10) copies of these plans for the permit.

Rough Grading applications cannot be approved until all relevant items in the project's approval conditions are satisfactorily addressed and:

1. SEPA is completed for the entire project (if required).
2. Site plan (or equal) for the project is approved.
3. All major project feasibility issues have been resolved (included recording of all off-site easements, etc.).
4. Conceptual utility drawings are accepted.
5. Construction plans for Grading (or Rough Grading), dry season TESC, and if applicable, rainy-season TESC, including the Seasonal Suspension Plan are approved.
6. Site restoration is feasible (replanting of mature forested areas and restoring existing Topographic character after extensive cuts or fills are examples of work that makes restoration infeasible).
7. Acceptable performance security is posted.

A Rough Grading Permit is not an "automatic" permit and may not be issued as a separate part of project permitting where, in the opinion of the Development Services Division, special circumstances exist related to "advance" site work. Such circumstances include, but are not limited to, consideration of project size, aesthetics, availability of City inspections, feasibility of restoration, and other factors.

Rough grading will not be approved under a separate permit for work during the rainy season for certain situations as shown in Chapter 10.