



PERMIT CENTER

GRADING PERMIT
(GRA)
SUBMITTAL PACKET

Informational Brochure

February 2010

GRA Application Checklist
GRA Permit Application
Plan Review Checklist with Appendices
GRA Additional Submittal Requirements

Prepared by:

City of Auburn

Customer Service Center

(253) 931-3010
FAX (253) 931-3053



GRADING PERMIT APPLICATION CHECKLIST (GRA)

Project Name: _____ GRA No.: _____

Applicant Name: _____ Date: _____

The following information is needed in order to submit a Grading (GRA) application requiring engineered plans to the City. Depending on the scope of work, some of the below items may not apply or may be combined with related items. Please review each item and provide all applicable information to insure a complete application. The City of Auburn’s current Engineering Design Standards Manual outlines requirements noted on this checklist.

The City will verify the completeness of the submittal packet as identified below. The “Additional Submittal Requirements Form,” is attached for reference only and does not need to be completed with the initial submittal but will be completed by city staff during the plan review process.

If you have any questions regarding required items, please contact the Public Works Department, Development Engineer at (253) 804-5073 or visit us at Auburn City Hall, 25 West Main Street, Second Floor, Auburn, WA 98001.

GRADING PERMIT SUBMITTAL PACKET COMPLETED

- Grading Permit Application
- Application Fee
- Grading Permit Plan Review Checklist

Indicate the other documents included with the Checklist below:

<u>Included</u>	<u>N/A</u>	<u>Item</u>
<input type="checkbox"/>	Required	Stormwater Site Plan (2 copies) (<i>Design Standards, Chapter 4, Surface Water Management Manual Volume 1, Chapter 4</i>)
<input type="checkbox"/>	Required	Geotechnical Report (1 copy) (<i>Design Standards, Chapter 4</i>)
<input type="checkbox"/>	Required	Plan Set (5 copies) (<i>Design Standards, Chapter 3</i>)
<input type="checkbox"/>	Required	Cover Sheet (<i>Design Standards, Chapter 3.04.1</i>)
<input type="checkbox"/>	Required	Temporary Erosion and Sedimentation Control Plans (<i>Design Standards, Chapter 3.04.2</i>)
<input type="checkbox"/>	Required	Grading Plans (<i>Design Standards, Chapters 3.04.2 and 5</i>)
<input type="checkbox"/>	Required	Plans submitted on non-ammonia based prints (<i>Design Standards, Chapter 3</i>)
<input type="checkbox"/>	Required	All plans and reports sealed by Washington State Licensed Professional Engineer per the requirements of WAC 196-23 (<i>Design Standards, Chapter 3</i>)
<input type="checkbox"/>	Required	Correct Datum Used (NAVD 88, State Plane Coordinate System) (<i>Design Standards, Chapter 3.04.1</i>)
<input type="checkbox"/>	<input type="checkbox"/>	Other: _____

Copy of Conditions from associated SEPA Determination or Land Use Action:

- Included with submittal
- Application made, but not final **Application No.** _____
- NA

Copy of Additional Required Reports (see SEPA Determination or Land Use Action for applicability):

- Critical Areas Report **Specify:** _____
- Other: _____
- N/A

Comments: _____

TO BE COMPLETED BY CITY STAFF:

- Application Submittal **IS NOT COMPLETE** as indicated above and must be resubmitted with all required elements.

_____ _____
Name **Date**

- Application Submittal has all known required documents to begin civil plan review.

This checklist has been reviewed and receipted by:

_____ _____
Name **Date**



Building Division
 25 West Main Street
 Auburn, WA 98001
 (253) 931-3020

For Staff Use Only

Application No: _____

Grading Permit Application

Project Information/Description:		
Site Address:	Parcel No. (Required):	
Legal Description:		
Description of Work:		
Property Owner:	Phone/Hm:	Phone/Wk:
Address:		(City/St/Zip):
Project Contact:		Phone:
Contractor:		Phone:
Address:		(City/St/Zip):
State Contractor's License #:		Business Registration #:
Engineer:		Phone:
Address:		(City/St/Zip):
Architect:		Phone:
Address:		(City/St/Zip):
Estimated Completion Date: _____	Amount of Fill: _____	Amount Exported: _____
Amount of Excavation: _____	Max Depth Fill: _____	Soil Rpt By: _____
Max Depth of Exc: _____	Max Slope Fill: _____	Eng Geol Rpt By: _____
Max Slope Exc: _____	Amount Imported: _____	Project Value: _____
<p>NOTE:</p> <p>This permit does not constitute approval or compliance with the rules, regulations, or requirements of any other jurisdiction, which may relate to the above project. Check with U.S. Army Corps of Engineers for possible permit requirements. Permits are non-transferable. HAUL ROUTES SHALL BE REQUIRED FOR ALL FILLS IN EXCESS OF 500 CUBIC YARDS. HAUL ROUTES SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ISSUANCE OF THE GRADING PERMIT.</p>		
<p>I CERTIFY THAT THE INFORMATION FURNISHED BY ME IS TRUE AND CORRECT AND THAT THE APPLICABLE CITY OF AUBURN REQUIREMENTS WILL BE MET.</p>		
Owner/Agent: _____		Date: _____
Printed: _____		



CITY OF AUBURN GRADING PERMIT PLAN REVIEW CHECK LIST

(To be completed by Applicant)

Project Name: _____ Date: _____

Prepared By: _____

This checklist correlates to the City of Auburn Design Standards (DS). The applicant should read Section 1, *General Requirements*, prior to proceeding with this checklist.

Please note that the information contained in the Design Standards and this checklist cannot provide for all situations and conditions that may be encountered. Specific provisions contained within the Design Standards and the checklist may not apply to all locations and existing conditions. These documents are intended to assist, but not substitute for, competent work by a professional civil engineer.

PROCEDURE

The applicant's engineer submits this checklist as part of the plan submittal package. The applicant's engineer will mark the "Complete" box to show that the described item has been completed in accordance with the Design Standards. The City's Development Review Engineer will verify the plans and reports for the project conform to the City's Design Standards. If deficiencies are identified during the review of the plans and reports, written comments and relined plans will be prepared and returned to the applicant upon completion of the plan review.

A. APPLICATION

Complete Item

*For City
Use Only*

1. Grading Permit Application (GRA) completed and attached.

2. GRA Application Check List attached. (FC192)

B. GENERAL PLAN REQUIREMENTS

1. Each sheet of the plan set has been stamped/sealed by a professional civil engineer, licensed in the State of Washington as required by WAC 196-23. The stamp/seal on the final mylars, to be submitted for approval, shall be wet signed and dated per WAC 196-23.

2. North arrow either to top, right, or left and scale shown on each sheet.

3. A title block has been provided along the right-hand edge on each plan sheet. The title block shall include the development title, (in bold print), the name, address, and phone number of the firm preparing the plan, the name of owner/applicant, a revision block, page (of pages) numbering, and sheet title (i.e. grading, erosion/sedimentation control, road and drainage, water and sewer, etc.)

B. GENERAL PLAN REQUIREMENTS (cont.)

Complete Item

**For City
Use Only**

- 4. Units of measurement have been indicated for all slope callouts as either % or ft. /ft. Do not mix units of measurement on a plan set. _____
- 5. All match lines with matched sheet numbers (stationing) are provided. _____
- 6. The street classification has been provided under the street name on all plan views. _____
- 7. City of Auburn Engineering approval block (4"x2") has been provided in lower right corner of each civil and public landscape plan sheet. Show project reference, (FAC #) in the approval block area. (See Appendix A for Sample Block B-1) _____
- 8. A Record Drawing Certification block has been provided on each plan sheet, located directly to the left of directly above other approval block(s). (See Appendix A for sample block B-4) _____

Are there critical areas that are to be identified and/or mitigated on this project?

Yes **No** If **yes**, then the following applies:

- 9. City of Auburn Planning approval block (4"x2") has been provided in the lower right corner of each critical mitigation plan sheet. Show project reference, (FAC #), in the approval block area. (See Appendix A for Sample Block B-3) _____

General Drafting Standards

- 10. Plan sheets are on sheet sizes 24 x 36 inches. Any variation must be approved by the City prior to plan submittal. Approved plans shall be good quality, 4-mil thickness mylar, or approved equal. No stick-on type material will be allowed. No Xerox, sepia or toner printed mylars are allowed, unless cold rolled. Margins shall be set to provide for 1/2 size drawings to fit on 11x 17 inches. _____
- 11. Lettering sizes are no smaller than 1/10 of an inch in height and shall be uppercase. _____
- 12. Existing features are shown with dashed lines, and/or half-toned (screened) _____
- 13. Proposed features are shown with solid lines. The intent is to clearly distinguish existing features from proposed improvements. _____

B. GENERAL PLAN REQUIREMENTS (cont.)

For City Use Only

Complete Item

- 14. Minimum scale is as indicated below. Any variation must be approved by the City prior to plan submittal.
 - a. Site work: 1" = 40' horizontal
 - b. Site work: 1" = 4' vertical
 - c. Public facility work: 1" = 20' horizontal
 - d. Public facility work: 1" = 2' vertical

- 15. APWA symbols have been used and are included in the legend of existing and proposed improvements and utilities.

C. PLAN SHEET ELEMENTS

I. Cover Sheet (Always Required)

The Cover Sheet(s) has the following applicable items:

- 1. GRA # is one inch (1") bold lettering above the title block on the cover sheet only. Initial submittal may read: **GRAXX-XXXX**.

- 2. A general scaled site plan covering an area approximately ten inches (10") square.

- 3A. Impervious Surface System Development Charge Calculations provided with the following information:
 - a. Total Existing Impervious (SF)* = _____
 - b. Total Proposed Impervious (SF) = _____
 - c. Net Change (subtract item b from item a) (SF)= _____

***Note:** "Impervious surface" for the purpose of calculating a system development charge and only as it pertains to this calculation means a hard surface area that prevents the entry of water into the soil mantle. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, concrete or asphalt paving. Open, uncovered, retention/detention facilities shall not be considered as impervious surfaces for the purpose of SDC fee calculation.

- 3B. Storm Permit Quantity Calculations provided with the following information:
 - a. Total Disturbed Area (SF)= _____
 - b. Total Added and Replaced Impervious Area (SF)= _____

- 4. Vicinity map with north arrow covering an area approximately five inches (5") square.

- 5. Site address.

- 6. Owner/Developer address, contact person, and phone number.

- 7. Engineer/Surveyor/Architect address, contact person, and phone number.

C. PLAN SHEET ELEMENTS (cont.)

Complete Item

**For City
Use Only**

- 8. Elevations with City datum (NAVD 88). City benchmark reference numbers and locations are indicated. _____
- 9. Sheet index. _____
- 10. Legend. _____
- 11. Legal description, including quarter section, section, township, and range. _____
- 12. Parcel number (King and Pierce County Tax Assessor No.) for site only. _____
- 13. Applicable plat name, lot numbers, site zoning and adjacent zoning. _____
- 14. An overall site plan key map shall be shown if the plan set includes more than five (5) plan sheets, unless otherwise directed by the City. _____
- 15. Applicable site information, including the number of parking spaces required and the number of parking spaces approved. _____
- 16. Type of building construction as defined by the adopted Building Code. _____
- 17. Site access, including adjacent driveways, roadways, and intersections, that may have an impact on the location and type of site access. _____
- 18. **Construction Sequence Required for all projects:** A construction sequence has been shown on the plans indicating the relative timing of key construction activities on the project, such as, site clearing, erosion control placement, grading, temporary detention and water quality phasing into permanent detention and water quality facilities, utilities, paving, landscaping and illumination, activities in the right-of-way and any other construction event needing special attention. For work within right-of-way, the plans shall indicate the time limits for such work are applicable. _____
- 19. **City of Auburn General Notes:** Eight (8) General Notes have been provided on the cover sheet. Other City standard construction requirements are referenced by General Note "2." Electronic copies of these notes are available on request. *(See Appendix B)*
- 20. Add the applicable required permits based on the Non-Building Permit Checklist. *(See Appendix C)*

II. Temporary Erosion and Sediment Control (TESC) Plan Sheet (Always Required)

Does this project include adding or replacing between 2,000 – 5,000 square feet of impervious surface, or clear or disturb between 7,000 square feet and 1 acre of land, or grade/fill up to 500 cubic yards?

Yes **No** If **yes**, then the following applies:

- A Construction SWPPP Short Form for this project must be provided, as per Appendix C, Volume 2 of the City of Auburn Surface Water Management Manual (SWMM). _____

Does this project include the addition or replacement of more than 5,000 square feet of impervious surface, or the clearing or disturbance of more than 1 acre, or grade/fill greater than 500 cubic yard?

Yes **No** If **yes**, then the following applies:

- A Construction SWPPP for this project must be provided, as per Section 2.3, Volume 2 of the City of Auburn Surface Water Management Manual (SWMM), _____

The following 12 Elements of Construction Stormwater Pollution Prevention must be provided, per Chapter 1, Volume 2 of the City of Auburn Surface Water Management Manual (SWMM):

- 1. Marked clearing limits, sensitive areas and their buffers, trees that are to remain. _____
- 2. The construction access is shown per Detail, EROSION-01. A wash pad or mitigation measure may be required by City Representatives during construction, per detail EROSION-02. _____
- 3. Onsite stormwater flow rates are controlled to protect properties and waterways downstream of site. _____
- 4. Siltation control measures (e.g. siltation ponds, silt fences, setbacks, hay bales, ditches, etc.) are provided to protect adjacent properties and shall be sized for runoff volumes associated with the graded site. Detention/retention facilities designed per requirements noted in Design Standards, Section 5.01.2 and 5.01.3. _____
- 5. Exposed and unworked slopes are stabilized by application of effective Best Management Practices (BMPs), as shown in the SWMM, including hydro seeding mixture and application rates. (See *Construction Standards, Division 8-01 for general purposes.*) _____
- 6. Slope runoff velocities have been reduced by reducing continuous length of slope, diverting off-site stormwater away from slopes and disturbed areas with interceptor dikes and/or swales. _____
- 7. All operable storm drain inlets are protected so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment. _____

C. PLAN SHEET ELEMENTS (cont.)

Complete Item

**For City
Use Only**

- 9. All pollutants have been handled and disposed, including waste materials and demolition debris, in a manner that does not cause contamination of stormwater. _____
- 10. No discharges to the City sewer system (storm or sanitary) unless approved by the City. _____
- 11. All temporary and permanent erosion control BMPs are maintained and repaired as needed to assure continued performance of their intended function. _____

III. Site Development

Does this project include pavement and landscaping?

Yes **No** If **yes**, then the following applies:

- 1. Finish elevations for pavement are provided. _____
- 2. Where storm drainage is directed against a curb, the curb used is concrete curb and gutter or concrete vertical curb (extruded curb or asphalt wedge curb in any form is not allowed). _____
- 3. Final pavement design section provided. _____
- 4. Sight distance triangles have been graphically shown for all intersections and driveways in accordance with Section 10.03 of the Design Standards on a composite sight plan that includes all above ground utilities and landscaping. _____
- 5. Root barriers have been used for all trees planted within five feet (5') of public underground utilities or paved surfaces. _____
- 6. The location, species, and size of planting materials are shown on the plans. _____

IV. Grading and Private Storm Drainage Plan (Site Development)

Does this project include onsite private storm facilities?

Yes **No** If **yes**, then the following applies:

- 1. Approximate excavation and fill quantities in cubic yards are indicated. _____
- 2. No fill or cut slopes proposed are steeper than two horizontal to one vertical (2:1) unless in accordance with an accepted geotechnical report sealed by a Washington Stated Licensed Engineer. _____
- 3. Type of fill material and associated compaction requirements are shown. _____

C. PLAN SHEET ELEMENTS (cont.)

Complete Item

**For City
Use Only**

4. Existing trees are shown: Evergreens six inches (6") in diameter or larger, deciduous trees four inches (4") or larger, measured four feet (4') above ground. Indicate if trees are to be removed or to remain. If trees are to remain, show method of tree protection during project construction.

5. Temporary retention or detention facilities including the City of Auburn's Standard Control Structure Detail No. STORM-04 are provided. Include water surface (W.S.) elevations, sizes, design storms for the W.S. elevations and release rates.

6. A minimum horizontal setback of five feet (5') has been provided between the bottom of any fill placement and the top of the bank of a defined drainage channel.

7a. If not addressed in the SEPA process, a haul route and proposed times that material will be hauled to and from the project site has been provided. The following needs to be provided in the plans for all site grading of more than 500 cubic yards of import and export via city streets:

- a. What type of material is being hauled? (Imported fill material for all structural fill and other fill activities shall be approved by the City.)
- b. Total quantity hauled as a part of this action.
- c. Total haul days of this action.
- d. Total quantity of material moved per day.
- e. Estimated number of trips per day.
- f. Estimated start date.
- g. Estimated completion date.
- h. Intended time of day of the haul.
- i. Intended route of the haul. (Clearly shown on a site map.)

7b. If haul routes are not provided during plan review, the following note has been added to the plans:

Prior to moving any materials or equipment on Public Streets, the Contractor shall submit a haul route plan to the Engineer for approval per section 1-06.7 of the Construction Standards.

Note: The haul route plan must be approved by the Engineer prior to the start of construction.

8. Typical ditch sections are shown. (Reference on the plans the City Standard Detail Number. Do not include the detail in the plans.)

9. Building roof and foundation drains are connected to site drainage system.

10. Existing topography has been screened back and overlaid by the proposed grades. At least one sheet showing all boundary survey information, (i.e. bearings, distances, lot sizes, etc.), has been provided.

C. PLAN SHEET ELEMENTS (cont.)

Complete Item

**For City
Use Only**

- 11. Spot elevations have been provided for very flat sites. Provide spot elevations along property line and thirty feet (30') beyond property line, at least every fifty feet (50'). If your project includes a parking lot provide spot elevations at all grade changes and along curbing. _____
- 12. Standard City of Auburn Detail Numbers have been referenced on the plan sheets appropriately and not copied into the plan sheets. If a project specifies modification to a Standard Detail a new detail must be shown on the plans. _____
- 13. Notes to protect and maintain erosion control facilities during grading operations have been provided. _____
- 14. Arrows to indicate drainage flow direction on the surface of parking lots, roadway intersections and cul-de-sacs have been provided. _____
- 15. Layout of the entire storm drainage pipe with length, slope, and material type labeled and direction of flow indicated has been shown. _____
- 16. Site specific details and cross-section sheets for storm drainage detention or retention facilities such as control discharge structures and pond cross-sections have been provided. Indicating water surface elevations, allowable discharge rates, and design storms. _____
- 17. An emergency overflow to the public storm system has been provided. _____
- 18. Berm dimensions, materials, compaction requirements for ditches and detention ponds are shown where applicable. _____
- 19. Locations of manholes and catch basins are shown, indicating type, stationing, offset, lid type, rim and invert elevations, and number of manholes and catch basins consecutively. _____
- 20. Existing and proposed sanitary sewers and water mains (use ghost lines) are shown, identifying crossing and minimum vertical distance between utilities. _____
- 21. Type of material and size of energy dissipaters (riprap, etc.) has been provided. _____
- 22. Details of storm water quality control facility has been provided. _____
- 23. Limits of surface water ponding in parking lots has been provided. _____
- 24. Trash racks are shown, if applicable. _____
- 25. Location, widths and type of easements are shown. _____
- 26. Location and types of pumps, if applicable, are shown. _____
- 27. Bio-swale location, length, width, slopes, and cross-section are shown. _____

C. PLAN SHEET ELEMENTS (cont.)

Complete Item

**For City
Use Only**

- 28. Planting and seeding requirements with establishment procedure in construction sequence for water quantity and quality systems has been provided. _____
- 29. Finish floor elevations are shown. _____
- 30. The controlling downstream storm drainage elevations have been shown including the associated design conditions. _____
- 31. If the detention/retention pond impounds water to ten feet (6') or more in depth at any point, or will impound a volume of ten (10) acre-feet or more than dam safety requirements have been met and a copy of the Department of Ecology Dam Safety Construction Permit has been provided. _____
- 32. Where practical to do so, ponds have been consolidated to minimize the total number of ponds required by the site. _____
- 33. Liners on the pond have been provided as recommended by a Geotechnical Engineer. _____
- 34. Fencing of the pond facility at the 10 year water surface elevation has been provided. _____
- 35. Pond aesthetics have been addressed. _____
- 36. Adequate maintenance access has been provided to pond cell #1, control structures and structures. _____
- 37. Bypass surface flows have been addressed. _____
- 38. Subsurface flows have been addressed and water surface elevations have been indicated. _____
- 39. Private drainage facilities have been clearly indicated on the plans. If a facility is proposed to be a joint public and private facility, justification for such a facility has been provided for City consideration. _____
- 40. Walls installed within the pond have a design provided by a Structural Engineer, including structural calculations and finish treatments. _____

C. PLAN SHEET ELEMENTS (cont.)

V. Private Storm Profile

Is the private storm system to be installed such that it will cross under, over, or within proximity of public utilities?

Yes **No** If **yes**, then the following applies:

Complete Item

***For City
Use Only***

- 1. Structures are shown, including size, location, type, station, invert elevation, type of lid or grate, grate elevation. _____
- 2. Pipes are shown include materials, size, slope (% or ft/ft), and lineal footage. _____
- 3. All utility crossings are shown and identify elevation, type and size of utilities. _____
- 4. Ditches are shown, where applicable, and indicate slope (% or ft/ft) and type. _____
- 5. Existing and finished grade along centerline is shown. _____
- 6. Connections to existing structures are shown. _____

VI. Cross Section Sheet

- 1. Cross-sections for fill and grading are shown through all properties to minimum thirty feet (30') outside of property lines. Minimum one section each way has been provided. More may be necessary to adequately represent the site. _____
- 2. Cross-sections through the temporary detention pond are shown and include inlet and outlet structures when applicable. _____
- 3. Horizontal scale of cross-section matching the plan view of the site has been provided. Vertical scale is 1/10 of the horizontal scale. _____

VII. Detail Sheet

- 1. Any detail specific to the project has been provided. _____
- 2. Standard City of Auburn Detail Numbers have been referenced on the plan sheets appropriately and not copied into the plan sheets. If a project specifies modification to a Standard Detail a new detail must be shown on the plans. _____
- 3. Storm control manhole, overflow structures, etc. with specific dimensions per site design have been provided. _____

C. PLAN SHEET ELEMENTS (cont.)

VIII. Private Wall Plans

Does this project include structural walls greater than four feet (4') in height or in unstable soil?

Yes **No** If **yes**, then the following applies:

Complete Item

**For City
Use Only**

- 1. Wall design is sealed by a Washington State Licensed Engineer. _____
- 2. Structural calculations have been provided. _____
- 3. Design details include all applicable sections, surfacing terracing, zone of influence for geogrids, easements, wall finish, etc. _____
- 4. Drainage facility, its conveyance and discharge system for the wall system has been shown. _____
- 5. Walls over two and a half feet (2.5') have a minimum of forty-two inch (42") railing or fencing provided. _____

Note: If the wall or wall system encroach into the public Right-of-Way, a Right-of-Way Use Permit will be required prior to plan approval.

IX. Utility Service Plans

Does this project include the private connections to public utilities?

Yes **No** If **yes**, then the following applies:

Complete Item

**For City
Use Only**

- 1. Show water services per the Design Standards, Chapter 7 – Water Facilities, and include the following items: _____
 - a. Existing water pipe size, location, and type of material
 - b. Proposed details of connections to existing water mains
 - c. Existing valve size, locations, and type
 - d. Existing fire hydrant locations
 - e. Existing water easements shown on plan
 - f. Proposed domestic meter service and line size and location
 - g. Proposed irrigation meter and line size and location
 - h. Proposed backflow prevention devices shown for domestic and irrigation meters
 - i. For buildings requiring fire sprinklers add Fire Sprinkler Note from Appendix B

C. PLAN SHEET ELEMENTS (cont.)

- 2. Show sanitary sewer service, per the Design Standards, Chapter 8 – Sanitary Sewer Facilities, and include the following items:
 - a. Existing public sewer pipe size, location, type of material, station
 - b. Existing location of manholes, type, stationing, offset, rim and invert elevations
 - c. Proposed stationing of side sewers from downstream manhole
 - d. Proposed connection of side sewer to City's sanitary sewer pipe with a tee
 - e. Proposed location of sanitary sewer cleanouts
 - f. Existing Location of sanitary sewer easements, Right-of-Way, adjacent property lines, parcel numbers for all lots
 - g. Proposed Floor drain, drain from other covered areas potentially subject to pollutants, and wash areas within parking lots shall be connected to the sanitary sewer through an approved oil/water separator

D. REPORTS (All reports shall be sealed by a Washington State licensed engineer.)

I. Stormwater Site Plan (Stormwater Comprehensive Report)

Is a Stormwater Site Plan required?

- Yes** **No** If **yes**, then refer to the Stormwater Site Plan Submittal Requirements Checklist, Volume 1, Appendix B of the Surface Water Management Manual. (See Appendix D of this document.)

II. Stormwater Operation and Maintenance Manual for permanent stormwater control BMPs and facilities

Is a Stormwater Operation and Maintenance Manual for permanent control BMPs and facilities required for this project?

- Yes** **No** If **yes**, then the following applies:

- 1. A narrative description of the on-site storm system. _____
- 2. An 11x17 inch map of the site, with locations of the flow control and treatment facilities _____
- 3. The person or organization responsible for maintenance of the on-site storm system, including phone number of the responsible party. _____
- 4. Location where the Operation and Maintenance Manual is kept and include a note that it must be made available to the City for inspection. _____
- 5. A description of each flow control and treatment facility including what it does and how it works. Include the manufacturer's documents. _____
- 6. For each flow control and treatment facility a description of all maintenance tasks, the frequency of each task, the triggers for as needed maintenance and the expected maintenance results. Include any manufacturer's recommendations. _____
- 7. Include relevant maintenance checklists and sample inspection and maintenance logs for each flow control and treatment facility. _____

D. REPORTS (CONT.)

III. Geotechnical Report

Is a Geotechnical Report required?

Yes **No** If **yes**, then the following applies:

- 1. Title page, includes project name and address. _____
- 2. General information includes existing site conditions and proposed improvements to the site. Provides a summary of the engineer's findings on proper methods to be used for the proposed project. _____
- 3. Site history, including any prior earthwork (i.e. cuts and fill work, imported soils, etc.) is provided. _____
- 4. Subsurface soil information and conditions, including groundwater elevations and subsurface flows is provided. Season high groundwater elevations needs are provided based on site testing during the wet season. _____
- 5. Soil log information and location on a site map is provided showing the proposed improvements. _____
- 6. Soil characteristics including suitability for fill compaction requirements is provided. _____
- 7. Slope stability analysis is provided. _____
- 8. Seismic hazards is provided. _____
- 9. Site plan showing the topography and proposed structures and paving is provided. Updates to the plans must be submitted to the City when they occur. _____
- 10. Grading information including depth of cuts and recommended slopes is provided. _____
- 11. Provided analysis of subgrades of proposed roadways (public and private) and determination of subgrade California Bearing Ration (CBR) for determination of street design section. _____
- 12. Analysis on the erosion potential of onsite soils and recommendation on temporary erosion control methods being used is provided. _____
- 13. Provided design analysis and calculations for rockery or Mechanically Stabilized Earth (MSE) walls over four feet (4') in height if proposed as part of the project design. _____
- 14. Conclusions and recommendations for all earthwork activity proposed for the project are provided. _____
- 15. Appendix with test pit and boring logs are provided. _____
- 16. Provided information on infiltration rates for retention systems. _____
- 17. The report is sealed and signed by a Washington State licensed geotechnical engineer. _____

D. REPORTS (CONT.)

IV. Critical Area Report

Does the proposed project include critical areas?

Yes **No** If **yes**, then the following applies:

The written report is in accordance with Auburn City Code (ACC) 16.10 and includes, at a minimum, the following:

Complete Item

***For City
Use Only***

- 1. The name and contact information of the applicant, the name, qualifications, and contact information of the primary author(s) of the Critical Area Report, a description of the proposal, and identification of all the local, state, and/or federal wetland related permits required for the project, and a vicinity map for the project. _____
- 2. A statement specifying the accuracy of the report and all assumptions made and relied on. _____
- 3. Documentation of any fieldwork performed on the site, including field data sheets for delineations, functional assessments, baseline hydrologic data, etc. _____
- 4. A description of the methodologies used to conduct the wetland delineations, functional assessments, or impact analyses including references. _____
- 5. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains and buffers on or adjacent to the proposed project area. For areas off-site of the project site, estimate conditions within three hundred feet (300') of the project boundaries using the best available information. _____
- 6. For each wetland identified on-site and within three hundred feet (300') of the project site, provide the wetland rating, required buffers, HGM classification, wetland acreage based on a professional survey from the field delineation (acreage for on-site portion and entire wetland are including off-site portions), Cowardin classification of vegetation communities, including vegetation characterization, habitat elements, soil conditions based on site assessment and/or soil survey information, and to the extent possible, hydrologic information such as location and condition of inlet/outlets, estimated water depths within the wetland, hydro period patterns based on visual cues (i.e. algal mats, drift lines, flood debris). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site. _____
- 7. A description of the proposed actions including an estimation of acreages of impacts to wetland and buffers based on the filed delineation and survey and an analysis of site development alternatives, including a no development alternative. _____
- 8. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development. _____

D. REPORTS (CONT.)

Complete Item

***For City
Use Only***

- 9. A description of reasonable efforts made to apply mitigation sequencing to avoid, minimize, and mitigate impacts to critical areas. _____
- 10. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity. _____
- 11. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions. _____
- 12. Evaluation of functions for the wetland and adjacent buffer using a functions assessment method recognized by local or state agency staff and including the reference for the method and all data sheets. _____
- 13. A copy of the site plan with the following:
 - a. Scaled maps depicting delineated and surveyed wetland and required buffers on-site and off-site critical areas that extend on to the project site, grading and clearing limits, development proposal, areas of proposed impacts to the wetlands/buffers.
 - b. Depiction of the proposed storm water management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydro period alterations from the project._____

D. REPORTS (CONT.)

V. Traffic Impact Analysis

Are you required by SEPA or by the Design Standards to have a Traffic Impact Analysis performed as part of a Grading or Site Development Approval?

Yes **No** If **yes**, then the following applies:

Complete Item

**For City
Use Only**

- 1. Executive Summary is provided. _____
- 2. Table of Contents is provided, consisting of:
 - a. List of Figures (Maps)
 - b. List of Tables_____
- 3. Introduction is provided, consisting of:
 - a. Description of proposed project.
 - b. Location of the project.
 - c. Site plan, including all access to City streets.
 - d. Circulation network, including access to City streets.
 - e. Land use and zoning.
 - f. Phasing plan, including proposed dates of project (phase) completion.
 - g. Project developer and contact person.
 - h. References to other traffic impact studies._____
- 4. Traffic Analysis is provided, consisting of:
 - a. Clearly stated assumptions.
 - b. Existing and projected traffic volumes (including turning movements), facility geometry (including storage lengths), and traffic controls (including signal phasing and multi-signal progression where appropriate) figures.
 - c. Project trip generation, including references (tables).
 - d. Project generated trip distribution and assignment figures.
 - e. Level of Service (LOS) and warrant analysis, existing conditions, cumulative conditions, and full-build of plan conditions with and without project._____
- 5. Conclusions and Recommendations are provided, consisting of:
 - a. LOS and appropriate Measure of Effectiveness (MOE) quantities of impacted facilities with and without mitigation measures.
 - b. Mitigation phasing plan including dates of proposed mitigation measures.
 - c. Define responsibilities for implementing mitigation measures._____
- 6. Appendices are provided, consisting of:
 - a. Description of traffic data and how data was collected.
 - b. Description of methodologies and assumptions used in analyses.
 - c. Worksheets used in analysis (i.e. signal, warrant, LOS, traffic control information)._____

D. REPORTS (CONT.)

VI. Winterization Report

Will this project have exposed soil or be worked on from October 1st to April 30th?

- Yes** **No**

If **yes**, then refer to Design Standards 5.01.4 and Construction Stormwater Pollution Prevention Plan of the Surface Water Management Manual.

Appendix A

Sample Engineering Approval Block (B-1):

PROJECT REF: _____

THESE PLANS ARE APPROVED FOR CONFORMANCE WITH THE CITY OF AUBURN'S ENGINEERING DIVISION REQUIREMENTS.

APPROVED BY: _____
DATE APPROVED: _____

Sample Planning Approval Block (B-2):

PROJECT REF: _____

THESE PLANS ARE APPROVED FOR CONFORMANCE WITH THE CITY OF AUBURN'S PLANNING DEPARTMENT REQUIREMENTS.

APPROVED BY: _____
DATE APPROVED: _____

Sample Critical Area Approval Block (B-3):

PROJECT REF: _____

THESE PLANS ARE APPROVED FOR CONFORMANCE WITH THE CITY OF AUBURN'S CRITICAL AREA REQUIREMENTS.

APPROVED BY: _____
DATE APPROVED: _____

Sample Record Drawing Certification Block (B-4):

RECORD DRAWING CERTIFICATION THESE DRAWINGS CONFORM TO THE CONTRACTOR'S CONSTRUCTION RECORDS.	
BY _____	DATE _____
TITLE/POSITION _____	
CONFIRMED BY CITY _____	DATE _____

Sample Parks Department Approval Block (B-5):

PROJECT REF: _____
THIS PLAN SHEET REFLECTS THE CITY OF AUBURN PARKS DEPARTMENT MINIMUM REQUIREMENTS
APPROVED BY: _____ PARKS DIRECTOR
DATE APPROVED: _____

Sample Postmaster Approval Block (B-6):

CITY OF AUBURN POSTMASTER APPROVAL	
APPROVED BY: _____	
TITLE/POSITION: _____	
DATE APPROVED: _____	

Appendix B

GENERAL NOTES

1. THIS DEVELOPMENT PROJECT SHALL CONFORM TO THE CITY OF AUBURN'S REQUIREMENTS AND BE IN ACCORDANCE WITH THE APPROVED PLANS. ANY CHANGES FROM THE APPROVED PLAN WILL REQUIRE APPROVAL FROM THE OWNER, ENGINEER, AND THE CITY.
2. ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE "WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT) STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (2002)," EXCEPT WHERE SUPPLEMENTED OR MODIFIED BY THE CITY'S CONSTRUCTION STANDARDS MANUAL.
3. A PRE-CONSTRUCTION MEETING SHALL BE REQUIRED PRIOR TO THE START OF ALL CONSTRUCTION. CONTACT THE PUBLIC WORKS DEPARTMENT AT 253-931-3010, TO SCHEDULE A MEETING.
4. LOCATIONS SHOWN FOR EXISTING UTILITIES ARE APPROXIMATE. THE CONTRACTOR IS CAUTIONED THAT OVERHEAD UTILITY LINES MAY NOT BE SHOWN ON THE DRAWINGS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE TRUE ELEVATIONS AND LOCATIONS OF ALL UNDERGROUND UTILITIES AND THE EXTENT OF ANY HAZARD CREATED BY OVERHEAD UTILITY LINES. IDENTIFICATION, LOCATION, MARKING, AND RESPONSIBILITY FOR UNDERGROUND FACILITIES OR UTILITIES, IS GOVERNED BY THE PROVISIONS OF CHAPTER 19.122 REVISED CODE OF WASHINGTON (RCW). PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL CALL ONE-CALL (1-800-424-5555) FOR UTILITY LOCATIONS (WATER, SANITARY SEWER, STORM SEWER, GAS, POWER, TELEPHONE, AND CABLE).
5. IF A PROPOSED ROUTE IS NOT INCLUDED ON THESE PLANS, A PROPOSED ROUTE AND SCHEDULE FOR HAULING MATERIAL TO THE SITE SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. IF THE CITY BELIEVES THAT THE PROPOSED HAUL ROUTE WILL ADVERSELY IMPACT THE STREET NETWORK, A SEPA AMENDMENT MAY BE REQUIRED TO EVALUATE THE IMPACTS AND DETERMINE MITIGATION REQUIREMENTS BEFORE BEGINNING WORK. HAULING MAY BE LIMITED TO APPROPRIATE OFF-PEAK HOURS OR ALTERNATIVE ROUTES, AS DETERMINED BY THE CITY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PUBLIC SAFETY ON AND AROUND THE PROJECT. PRIOR TO THE START OF WORK, ALL METHODS AND EQUIPMENT USED FOR TRAFFIC CONTROL AND STREET MAINTENANCE SHALL BE SUBMITTED TO THE CITY FOR APPROVAL. CONTRACTORS AND THEIR SURETY SHALL BE LIABLE FOR INJURIES AND DAMAGES TO PERSONS AND PROPERTY SUFFERED BECAUSE OF CONTRACTORS OPERATIONS OR NEGLIGENCE CONNECTED WITH THEM.
7. ALL CONSTRUCTION SURVEYING FOR EXTENSIONS OF PUBLIC FACILITIES SHALL BE DONE UNDER THE DIRECTION OF A WASHINGTON LICENSED LAND SURVEYOR OR A WASHINGTON LICENSED PROFESSIONAL CIVIL ENGINEER.
8. CERTIFIED DRAWINGS ARE REQUIRED PRIOR TO PROJECT ACCEPTANCE. REFER TO THE CITY'S "RECORD CONSTRUCTION DOCUMENT" HANDOUT.

Appendix B (cont.)

GRADING AND EROSION CONTROL NOTES

1. WITHIN THE CITY OF AUBURN, ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES INDICATED ON THE PLANS MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO LAND CLEARING AND/OR OTHER CONSTRUCTION ACTIVITIES. THESE FACILITIES SHALL BE MAINTAINED AND UPGRADED, IF NECESSARY, TO INSURE THAT SEDIMENT-LADEN WATER AND STORM DRAINAGE RUNOFF DOES NOT IMPACT THE ADJACENT PROPERTIES, NATURAL DRAINAGE WAYS, OR THE EXISTING CITY STORM DRAINAGE SYSTEM.
2. THE SOURCES FOR ALL MATERIAL IMPORTED TO THE SITE SHALL BE APPROVED BY THE CITY.
3. THE STORM DRAINAGE DETENTION (RETENTION IF INFILTRATION SYSTEM IS USED), SEDIMENTATION AND EROSION CONTROL FACILITIES DEPICTED ON THE APPROVED DRAWINGS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. ADDITIONAL DRAINAGE AND EROSION CONTROL FACILITIES MAY BE REQUIRED AS SITUATIONS WARRANT DURING CONSTRUCTION. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT AND ADDITIONS TO THESE CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITEE.
4. THE TEMPORARY EROSION CONTROL FACILITIES, INCLUDING ALL PERIMETER CONTROLS AND THE DETENTION (RETENTION IF INFILTRATION SYSTEM IS USED), CONTROL PONDS, SHALL REMAIN IN PLACE UNTIL FINAL SITE CONSTRUCTION IS COMPLETED. AFTER CITY APPROVAL, THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVING ALL TEMPORARY FACILITIES.
5. THE CONTRACTOR WILL BE REQUIRED TO WATER THE SITE, AS NECESSARY, TO REDUCE DUST EMISSIONS AS A RESULT OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL ALSO SWEEP ALL AFFECTED PUBLIC ROADS, AS NECESSARY, TO REMOVE MATERIAL DEPOSITED AS A RESULT OF PROJECT CONSTRUCTION ACTIVITY.
6. ALL AREAS OF ACTIVE EARTHWORK WHICH HAVE THE POTENTIAL FOR EROSION AND SEDIMENTATION IMPACTS ON ADJACENT PROPERTIES, NATURAL DRAINAGE WAYS, OR THE EXISTING CITY STORM DRAINAGE SYSTEM MUST BE STABILIZED ACCORDING TO THE FOLLOWING SCHEDULE:

FROM APRIL 1ST TO SEPTEMBER 30TH, AREAS AT FINAL GRADE AND THOSE THAT ARE SCHEDULED TO REMAIN UNWORKED FOR MORE THAN THIRTY (30) DAYS SHALL BE STABILIZED WITHIN TEN (10) DAYS.

FROM OCTOBER 1ST TO MARCH 31ST EARTHWORK ACTIVITIES SHALL BE CONDUCTED IN STAGES ORDER TO MINIMIZE SOIL EXPOSURE. EXPOSED SOILS WITH AN AREA GREATER THAN 5,000 SQUARE FEET THAT ARE SCHEDULED TO REMAIN UNWORKED FOR MORE THAN 24 HOURS AND EXPOSED AREAS OF LESS THAN 5,000 SQUARE FEET THAT WILL REMAIN UNWORKED FOR MORE THAN SEVEN (7) DAYS SHALL BE STABILIZED IMMEDIATELY.

Appendix B (cont.)

FIRE SPRINKLER SYSTEMS NOTES

SPRINKLER SYSTEMS SHALL MEET CITY OF AUBURN STANDARD 7.01.5.2 AND THE FOLLOWING REQUIREMENTS:

1. PROPOSED FIRE LINE TO BE SIZED BY A FIRE PROTECTION ENGINEER.
2. BACKFLOW PROTECTION IS REQUIRED ON FIRE SPRINKLER LINES
3. A SEPARATE DETAILED PLAN OF THE UNDERGROUND FIRE SPRINKLER SUPPLY LINE SHALL BE APPROVED BY THE FIRE MARSHALL AND INSTALLED BY A WASHINGTON STATE CERTIFIED LEVEL "U" CONTRACTOR IN ACCORDANCE WITH WAC 212-80-010.
4. A POST INDICATOR VALVE SHALL BE INSTALLED ON THE FIRE SPRINKLER SUPPLY LINE TO ISOLATE THE SYSTEM FROM THE CITY'S WATER SYSTEM WHEN REQUIRED FOR REPAIR.
5. BLOCKING, PIPING, AND RODDING DETAILS SHALL BE PROVIDED WITHIN THE SUBMITTAL.
6. APPROVAL OF THE CIVIL PLANS DOES NOT APPROVE THE INSTALLATION OF THE SPRINKLER SYSTEM SUPPLY PIPING.

CROSS CONNECTION CONTROL NOTES

CROSS CONNECTION CONTROL SHALL MEET THE FOLLOWING REQUIREMENTS:

1. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE INSTALLED IN A MANNER THAT WILL ALLOW PROPER OPERATION, AND IN-LINE TESTING AND MAINTENANCE.
2. A BACKFLOW ASSEMBLY PLUMBING PERMIT IS REQUIRED FOR ALL ASSEMBLIES INSTALLED WITHIN THE CITY OF AUBURN, AND/OR THE CITY'S WATER DISTRIBUTION SYSTEM.
3. BACKFLOW ASSEMBLIES MUST BE ON THE CURRENT WASHINGTON STATE DEPARTMENT OF HEALTH – BACKFLOW ASSEMBLIES APPROVED FOR INSTALLATION LIST.
4. BACKFLOW ASSEMBLIES MUST BE TESTED BY A STATE CERTIFIED BACKFLOW ASSEMBLY TESTER, AND INSPECTED AND APPROVED BY A CITY OF AUBURN CROSS CONNECTION CONTROL SPECIALIST.
5. PRIOR TO INSTALLATION, SUBMIT TO THE DEVELOPMENT REVIEW ENGINEER FOUR (4) SETS OF BACKFLOW PREVENTION ASSEMBLY PLANS, INCLUDING THE CONNECTION POINT TO THE CITY MAIN FOR REVIEW AND APPROVAL.



**PUBLIC WORKS DEPARTMENT
ENGINEERING
NON-BUILDING PERMIT CHECKLIST
FOR GRADING/OTHER PROJECTS**

Complete the checklist and include with the next submittal.
(Check and complete all applicable items.)

- Special Permit Required**
 - Sidewalk, driveway, and/or curb and gutter proposed in the right-of way

- Construction Permit Required**
 - Construction proposed in the right-of-way that is not covered by another permit

- Water Permit(s) - number required: _____**
 - Domestic Water Meter - _____ meter(s)
 - Irrigation Water Meter - _____ meter(s)
 - Fire Hydrant Relocation - _____ hydrant(s)

- Fire Line Connection Permit(s) – number required: _____**
 - Fire Line - _____ connection(s)

- Sewer Permit(s) - number required: _____**
 - Side Sewer - _____ connection(s)
 - Oil and Water Separator - _____ separator(s)
 - Side Sewer Repair - _____ repair(s)

- Storm Permit(s) - number required: _____**
 - Permanent storm system and/or new impervious surface
 - Multi-family Building - _____ building(s)

- Residential Storm Permit(s) - number required: _____**
 - Residential Infiltration System - _____ single-family home(s)

- Backflow Permit(s) - number required: _____**
 - Non-residential Domestic Water Meter - _____ meter(s)
 - Irrigation Water Meter - _____ meter(s)
 - Fire Line - _____ connection(s)

PRIOR TO SCHEDULING PRECONSTRUCTION CONFERENCE (cont.)

Required	Completion Date	Item
<input type="checkbox"/>	_____	Executed private joint access easements
<input type="checkbox"/>	_____	Executed joint side sewer easement and agreement
<input type="checkbox"/>	_____	Executed Critical Areas easements
<input type="checkbox"/>	_____	Executed Storm Water Easement and Maintenance Agreement
<input type="checkbox"/>	_____	Executed Developer Participation Agreement
<input type="checkbox"/>	_____	Performance Bond
<input type="checkbox"/>	_____	Traffic Control Plan
<input type="checkbox"/>	_____	Issued Storm Permit(s)
<input type="checkbox"/>	_____	Issued Water Permit(s)
<input type="checkbox"/>	_____	Issued Sewer Permit(s)
<input type="checkbox"/>	_____	Other: _____

PRIOR TO START OF CONSTRUCTION

<input checked="" type="checkbox"/>	_____	Pre-construction meeting completed
<input type="checkbox"/>	_____	Winterization Plan
<input type="checkbox"/>	_____	Issued WSDOT Permit
<input type="checkbox"/>	_____	Other: _____

PRIOR TO CERTIFICATE OF OCCUPANCY/PROJECT ACCEPTANCE

<input checked="" type="checkbox"/>	_____	Contractor Redline Construction Plans
<input checked="" type="checkbox"/>	_____	Record Construction Drawings (Redline Mylars)
<input type="checkbox"/>	_____	Final storm drainage report (2) and cover letter
<input type="checkbox"/>	_____	Other: _____