

507 CONSTRUCTION PLANS

A. General

Plans are required for proposed road, utility, and site construction within county rights-of-way and private roads, unless section 507.B. applies. Plan content and format are governed by these Standards. A complete set of engineered horizontal plans and vertical profiles, together with applicable stormwater and erosion-sedimentation control plans shall be prepared and submitted to the County Engineer.

Construction plans must sufficiently document and summarize the design assumptions, computations, and parameters that form the basis of the project design.

Final engineered plans (including stormwater and all grading and utility plans) must have the approval of the County Engineer prior to any construction. Recording of final plats/short plats or binding site plans shall not be granted prior to approval of the plans.

B. Construction Plan Waivers

The county may waive construction plan requirements, wholly or in part, based on certain criteria, which may include, but is not limited to, the following:

- No more than 5,000 square feet of impervious surface will be created within existing publicly maintained rights-of-way
- No more than 20,000 square feet of impervious surface will be created within new or existing privately maintained rights-of-way or easement
- No more than 30,000 square feet will be cleared and/or graded within the rights-of-way or easement
- Existing or proposed road grade does not exceed 12%
- Existing or proposed road has a standard cross section
- The work does not intercept a stream or wetland, or otherwise impact natural surface drainage, as set in County Code regarding critical areas, shorelines, and surface waters
- No utilities (water, sanitary sewer, utility poles, etc.) are impacted
- Does not establish new or alter existing stormwater retention/detention facility within any rights-of-way or easement
- A Stormwater Design Report is not required per Whatcom County Development Standards (WCDS) Ch. 2 *Stormwater Management*
- Whatcom County Development Standards drawings, submitted with required permits/approvals, are sufficient to describe the improvement(s) to be constructed

C. Plan Submittal and Review Process

The process of submitting engineered road, utility, and site plans to the County for the purpose of review and approval shall be in accordance with the procedure outlined below:

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1. Initial Submission

- a) Plans shall include a brief project summary/narrative as needed for project clarity.
- b) A single complete set of engineered road plans and specifications (check prints). See 'Construction Plan Submittal Checklist' in Appendix F as a plan submittal guide. Appendix F is used by county staff to review project proposals for meeting county codes/standards, constructability, county inspection, and record drawings.
- c) All plan sets shall include the information per Appendix F section A. *General Submittal Requirements*, No. 1. & 2, section B. *Items Required on All Sheets*, and section C. *Title Sheet*. County Engineer can require other components of the checklist, dependent on the project.
- d) If required per Chapter 2 - *Stormwater Management*, WCDS, Stormwater Management Plans and Specifications shall be included with the road construction plan submission.
- e) If applicable to project, design data for a typical set of construction plans and reports may include, but are not limited to, the following:
 - Geotechnical and soil report
 - Wetland report
 - Structural reports including foundation and stability calculations for retaining walls, bridges, embankments, etc.
 - Topographic maps
 - Traffic report
 - Pavement design report
 - Record drawings of existing utilities
 - Street classification
 - Design speeds
- f) Preliminary check prints must be clearly identified as "PRELIMINARY" or contain such wording so it may be differentiated from the final plans. Preliminary plan set must be stamped, but need not be signed or dated by the Engineer of Record (refer. WAC 196-23-020 (2)).
- g) The final plans shall include a professional certification note. Plan sheets shall be prepared, signed, and stamped by a professional


engineer that has been retained by the developer. The professional engineer shall make the following statement:

"I hereby declare that these documents were prepared under my direct supervision and that the plans, specifications and design shown herein generally conform to accepted engineering standards and meet the requirements set forth under the Whatcom County Development Standards, except as specifically set forth under note ____, page ____ of these plans."

**ENGINEER'S
SEAL**

*Engineer's Name and
Registration Number*
Date _____, 20__

- h) County Review Approval block shall be as follows on all construction plans and supporting documents with the final approved plans showing the acceptance signature of the designated representative of the County Engineer:

REVIEW APPROVAL	
REVIEW IS FOR GENERAL COMPLIANCE AND CONSISTENCY WITH APPLICABLE WHATCOM COUNTY CODES, REGULATIONS, AND/OR STANDARDS	
	NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DATA, DIMENSIONS, OR DETAILS
DEPARTMENT OF PUBLIC WORKS-ENGINEERING SERVICES	
BY: _____	DATE: __ / __ / __

Whatcom County shall not be responsible for the accuracy and adequacy of the design or dimensions and elevations on the plans. Whatcom County, through the acceptance of the construction plan or stormwater report and other supporting documents, assumes no responsibility for the completeness and/or accuracy of the construction plan or drainage report.

2. Revisions

- a) Following a review by the County Engineer, the reviewed check prints ("redlines") will be returned to the Engineer of Record for any modifications that may be required.
- b) Engineer of Record shall return revised construction plans to the County Engineer along with the previous full set of redlines.
- c) For post approval change orders see section 511.A.5, *Basis for Control of the Work*.

3. Final Submission

- a) Include one (1) complete set of revised engineered road plans, specifications and supporting calculations reflecting comments documented in the previous submissions.
- b) Plans shall be original drawings which are stamped, signed, and dated by the Engineer of Record. Submittal shall be on white bond paper stock.
- c) Include the last set of redlines.
- d) Upon approval by the County, the plans (final submission) will be signed by the County Engineer and returned to the Engineer of Record.
- e) The Engineer of Record shall return the number of copies to be determined by Public Works Engineering Services.

D. Record Drawings

1. General

- a) Record drawings (previously known as "as-built" plans) clearly indicate the "as-constructed" state of the project. Record drawings are required prior to final approval of all public infrastructure and private stormwater facilities.
- b) Record drawings shall reflect the same degree of detail as the original plan drawings, and shall reflect any deviations from or changes to the approved construction plans including, but not limited to, the following details:
 - Roadway centerline profiles and slopes; vertical and horizontal curves; and roadway widths
 - Curb ramps
 - All pipe slopes
 - All catchbasins and manholes, inverts of inlets and outlets, rim elevations
 - All detention pond elements, including elevations of any overflow structures, bottom of pond elevations at each corner and center, inlet and outlet pipe invert elevations, elevations at every 25 feet inside and outside of toe of berm and top of berm

- Control structure elements including size and elevation of all orifices, standpipe notches, bottom of structure, and top of lid
- Elevations on dispersion trenches at all pipe inlets and outlets
- Finished grade of areas changed by grading, with either spot elevations or new contours with actual top and toe of slopes

2. Record Drawing Submission

- a) The applicant shall first submit a paper copy of the record drawing checkprints for County review. The record drawings shall be done on a copy of the original approved construction plans.
- b) The County will review the checkprints and redline any necessary changes. The applicant shall then resubmit a checkprint of the revised record drawings to the County for approval.
- c) Upon County approval of the record drawing checkprints, the applicant shall then submit the final record drawings on mylar or approved equal to the County Engineer.
- d) The Professional Engineer shall execute the following certification on all pages of the final record drawings:

RECORD DRAWING CERTIFICATION

I hereby affirm, to the best of my knowledge and consistent with the industry standard level of care, that all infrastructure improvements shown on these Record Drawings reflect the work as constructed, that all modifications meet the performance standards of the original design approved by the County Engineer, and that all elements shown comply with Section 507.D. of the Whatcom County Development Standards Chapter 5 - Road Standards.

**ENGINEER'S
SEAL**

*Engineer's Name and
Registration Number*

Date _____, 20____

- e) All final record drawings for public infrastructure, and private stormwater facilities when required by the County Engineer, shall be submitted to the County in a county approved digital format recorded in the current release of AutoCAD or compatible format. The digital

record drawings shall generally conform to the current drafting standards adopted by the Washington State Chapter of the American Public Works Association (APWA).