



GRADING & DRAINAGE PLAN AND REPORT SUBMITTALS

Purpose: To clarify Medina submittal requirements for Grading & Drainage Permits.

Summary: MMC Section 13.06.020 adopts the Washington State Department of Ecology *2019 Stormwater Management Manual for Western Washington*. All plans and reports regarding grading and drainage shall follow the requirements of the Manual and information provided herein. By receiving submittals that are complete and uniform in format, code compliance review and permit approval will be more efficient. Volume III, Chapter 3.2 of the Manual details specific information regarding the preparation of the required documents.

Requirements

1. STORMWATER SITE PLAN (**DRAINAGE REPORT**)

Minimum Requirement 1 (MR1) requires that a Stormwater Site Plan (SSP) be prepared by a licensed engineer for most projects. The SSP is the comprehensive drainage **report** containing all the technical information and analysis necessary to evaluate a proposed project for compliance with Ecology and City stormwater requirements. The report (SSP) shall contain all the following information:

- Cover page with title, project address, grading & drainage permit number, date, and name of the engineering firm (and engineer's seal) that prepared the report.
- Project Overview. Brief narrative describing the general aspects of the project, pre- and post-developed conditions of the site, site area and size of the improvements, and the pre- and post-development stormwater runoff conditions. Include discussion of off-site areas draining onto the property, the drainage patterns of the property, and off-site areas receiving runoff from the property.
- Vicinity map indicating the property with adequate detail of access roads and off-site drainage patterns to a local receiving water.
- Site map (topographic survey) showing information pertinent to grading & drainage such as title, address, permit number, symbol legend, property lines, existing buildings and impervious surfaces, topography, hydrologic features, trees, streets, easements, walls, and utilities.
- Existing Conditions Summary. Identify total lot area, runoff patterns, natural receiving waters, and existing areas (square feet) of impervious and pervious surfaces. Identify if

the project will be subject to the requirements for “New Development” or “Re-Development” (include markups of Figures 1-3.1 and 1-3.2 in the Manual to document these determinations).

- **Off-Site Analysis.** Per Minimum Requirement 4 (MR4), a downstream analysis is required to document the impacts of runoff leaving the project site. The analysis may cease at the point the site’s runoff discharges into a City-owned conveyance system, including a creek, lake, or large pond. This analysis shall include specific details, maps, photographs, and narrative describing the conditions of the downstream path of the water and potential problems with flooding or erosion.
- **Minimum Requirements.** Identify and discuss all applicable minimum requirements. Discussion shall include identification of the requirement and thresholds and how the project will meet those requirements, or are not feasible. Be specific and provide backup documentation (e.g., runoff calcs, soil information) to support conclusions.
- **Permanent Stormwater Control Plan.** Provide narrative and analysis for selecting LID BMPs, and Runoff Treatment & Flow Control BMPs. Selection of BMPs should follow Volume III Chapter 1 of the Manual. Provide justification for any LID BMPs that are determined to be “infeasible”. Include summary of how the project complies with the applicable requirements. Include exhibits, maps, soil data, land cover areas, calculations, assumptions, site parameters, and references regarding the design of conveyances, flow control facilities, and runoff treatment facilities.
- **Geotechnical Engineering Report.** Provide report to include information regarding existing drainage patterns, soil and subsoil properties including the potential for infiltration of stormwater, and recommendations for structure support, handling of stormwater runoff, and erosion control risks and measures.
- **Operation and Maintenance Manual.** Prepare and submit an operations and maintenance manual for each Flow Control and Runoff Treatment BMP.

2. CONSTRUCTION STORMWATER POLLUTION PREVENTION PLANS (CSWPPP)

- CSWPPP are required per Minimum Requirement 2 (MR2) for projects that disturb more than 7,000 SF OR results in more than 2,000 SF of new or replaced impervious surface. Preparation of the CSWPPP should follow Section II-2.4 of the Manual.

3. STORMWATER CONTROL DRAWINGS

- **Drawings.** Prepare detailed drawings of the storm drainage collection, conveyance, runoff treatment, flow control, and best management practices (BMPs) proposed to meet the requirements. All plan sheets shall include a title block with site address and permit number, sheet numbers, and sheet title. Include a legend and standard notes.

- Drawings shall include property lines, easements, existing and proposed contours, walls, hard surfaces, footing drains, wall drains, roof downspouts and drains, conveyance pipes with type, size, and slope, structures (yard drains, cleanouts, catch basins) with rim and invert elevations, and connections to existing storm infrastructure. Provide detail drawings for all structures, and flow control or runoff treatment facilities.
- If the project includes a runoff treatment or flow control facility, a Declaration of Covenant shall be prepared (see Information Bulletin regarding Declaration of Covenant). A drawing shall be prepared, meeting King County Recorder's Office standards for such purpose. This drawing must be drawn to scale with sufficient detail to understand the location and nature of the facility(s) and should avoid excess information that would render the recorded drawing unreadable.

4. REVISIONS AND RECORD DRAWINGS

- Once the stormwater site plan and stormwater control drawings are approved by the City and construction begins, revisions to the project may occur. Revisions to the drainage system could be due to new information, unforeseen site conditions, availability of materials, site layout revisions, or other. The City shall determine if these revisions warrant a formal submittal of a revised stormwater site plan (report) or drawings. Proposed revisions shall be prepared per Volume III Chapter 3.3 of the Manual.
- Upon completion of the project, the City may request submittal of record drawings if as-built conditions vary significantly from the approved drawings. Record drawings shall be prepared by the engineer-of-record.