Abbreviated Drainage Plans

An **Abbreviated Drainage Plan** is simply a shortened version of a full Drainage Control Plan (See Guide Sheet 1C). Even on many small projects, stormwater management measures must be taken to mitigate stormwater runoff and still comply with the requirements of the **2016 City of Olympia Drainage Design and Erosion Control Manual (DDECM)** and the Phase II Municipal Stormwater Permit with Washington State Department of Ecology.

Abbreviated Drainage Plans are required when a project exceeds the applicable thresholds in Volume I, Section 2.4 of the DDECM (Refer to Guide Sheet 1A to determine if a project must prepare a full Drainage Control Plan or may submit an Abbreviated Drainage Plan). Abbreviated Drainage Plans address Core Requirements #1 through #5 of the DDECM. Typical types of projects where an Abbreviated Drainage Plan is appropriate may include:

- Single family residential or duplex construction
- Small commercial site development and redevelopment projects
- Clearing and grading projects, including tree and vegetation removal
- Demolition projects

This guide sheet briefly explains the components of an Abbreviated Drainage Plan further described in detail in Volume I, Chapter 3 of the DDECM. The checklists included in this guide sheet should be used by applicants prior to any application intake meeting with Community Planning & Development to ensure a complete plan and expedient design review.

When does a project need an Abbreviated Drainage Plan?

Any project that **creates between 2,000 and 5,000 square feet of new plus replaced hard surface OR has a land disturbing activity greater than 7,000 square feet in area** may prepare an Abbreviated Drainage Plan. If a project is within these thresholds, preparation of an Abbreviated Drainage Plan will fulfill Core Requirement #1 (Section 2.5.1, Volume I, DDECM) and a full Drainage Control Plan is not necessary. If your project exceeds 5,000 square feet of new plus replaced hard surface or disturbs more than 0.75 acres of vegetated area, a full Drainage Control Plan is required (see Guide Sheet 1C).

A "hard surface" is any impervious surface, permeable pavement, or vegetated roof. Common impervious surfaces include rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled or chip-sealed surfaces that similarly impede the infiltration of stormwater into underlying soils.

"Land disturbing activity" includes clearing, vegetation removal, grading and earthwork, demolition of structures, and creation or replacement of hard surfaces.

What is included in an Abbreviated Drainage Plan?

At minimum, all Abbreviated Drainage Plans include the following submittal items:

Site Development Drawings

The Abbreviated Drainage Plan site development drawings generally contain all the pertinent information necessary for construction of a project. This may include applicable drainage, grading, erosion and sediment control, and topographic survey information, as well as any applicable notes or details. Many times the site development drawings for a project may be combined with other permit submittal requirements with similar content. However, a number of key items are required on the drawings, and applicants and designers should use the content completeness checklist provided with this Guide Sheet to verify all requirements are met.

Written Summary & Calculations

Abbreviated Drainage Plans shall include a written summary of the proposed project, which explains how the project complies with applicable stormwater requirements. A complete summary should address each of the following Core Requirements from Section 2.5, Volume I of the DDECM:

- Core Requirement #1 – Preparation of Drainage Control Plans
- Core Requirement #2 – Construction Stormwater Pollution Prevention
- Core Requirement #3 – Source Control of Pollution
- Core Requirement #4 – Preservation of Natural Drainage Systems and Outfalls
- Core Requirement #5 – On-Site Stormwater Management/Low Impact Development

The summary shall provide written justification – including citation of site conditions identified in a soils report – for any On-Site Stormwater Management/Low Impact Development Best Management Practices (BMPs) that are proposed or determined to be "infeasible" for the project site. The written summary shall also provide calculations related to sizing stormwater BMPs or conveyance systems, analyses of site or downstream conditions, documentation of infeasibility issues, etc.

If the applicant elects or must use the Low Impact Development (LID) performance standard option of Core Requirement #5 – On-Site Stormwater Management, they shall provide design details of all BMPs that are used to help achieve the standard, and a complete computer model report including input files and output files. Projects choosing to meet Core Requirement #5 by using the LID prescriptive list option must provide design details for all BMPs, discussion of BMP infeasibility according to Volume V of the DDECM, and a calculation sheet for sizing chosen BMPs.

Onsite Soils Report

In support of BMPs meeting Core Requirement #5, Abbreviated Drainage Plans must include a soils report prepared by a qualified professional (see below for more information on professional qualifications). The report shall include soil surveys, test pits or borings, or soil grain size analysis to sufficiently characterize the soils onsite and suitability for infiltration facilities. See Chapter 3, Volume III of the DDECM for reporting requirements.

Construction Stormwater Pollution Prevention Plan

All land disturbing activities and projects creating hard surfaces – such as pavements, roofs, etc. – must address stormwater runoff from construction areas. Sediment from soil erosion, waste concrete, spills, and other construction materials that may enter stormwater are considered pollutants and must be managed properly. A Construction Stormwater Pollution Prevention Plan (C-SWPPP) for a project outlines all the necessary methods for properly managing stormwater during construction phases when the site is less than stable. Preparation of a C-SWPPP meets Core Requirement #2 (Section 2.5.2, Volume I, DDECM). Additional guidance for preparation of C-SWPPPs can be found in Guide Sheet 2A.

Projects required to prepare an Abbreviated Drainage Plan may choose to prepare a *short-form* Construction Pollution Prevention Plan. Instructions and downloadable templates for preparing a short-form C-SWPPP can be found at http://olympiawa.gov/ddecm.

Additional items required to accompany an Abbreviated Drainage Plan may also include Soil and Vegetation Plans or reports, critical areas reports, environmental assessments, frontage improvement plans, or utility plans as required by the City. Please contact Community Planning & Development staff if you have questions about these additional plans.

Does my project require Low Impact Development (LID)?

All projects that exceed 2,000 square feet of new plus replaced hard surface are required to manage runoff from those hard surfaces using low impact development techniques and principles. Stormwater runoff from hard surfaces must be managed with rain gardens/bioretention cells, permeable pavements, downspout infiltration, or stormwater dispersion to native vegetation. In addition to mitigating runoff from hard surfaces, all disturbed pervious, landscaped areas on a project must meet the City's requirement for post-construction soil quality and depth (BMP T5.13 in Volume V, DDECM).

Do I need to hire an engineer?

State law requires that engineering work be performed by or under the direction of a professional engineer licensed to practice in Washington State. Designs and plans involving construction of water quality treatment facilities, flow control facilities (detention ponds or infiltration basins, vaults, or galleries), structural pollution source control facilities, LID facilities (using performance standard design), or drainage conveyance systems (such as inlets, pipes, swales, and ditches) shall be prepared by or under the direction of a licensed engineer. The "practice of engineering" is further defined in RCW 18.43.020(5)(a).

All onsite soils evaluations and reports must be prepared by a professional soil scientist certified by the Soil Science Society of America (or equivalent national program), locally licensed on-site sewage designer, or a professional engineer, geologist, hydrogeologist, or engineering geologist registered in the State of Washington.

Drainage Control Plans that address all nine Core Requirements of the DDECM must have plans and reports prepared, sealed, and signed by a civil engineer licensed in Washington State. Abbreviated Drainage Plans that require engineering calculations per the DDECM to size pipes, swales, inlets, infiltration facilities, rain gardens or bioretention cells, downspout infiltration or dispersion, permeable pavements, green roofs, or construction stormwater best management practices shall also be prepared by a licensed engineer. Construction Stormwater Pollution Prevention Plans (SWPPPs) that involve engineering calculations must also be prepared by or under the direction of a licensed engineer.

Abbreviated Drainage Plans for single-family residences and small projects similar in size may use prescriptive methods for sizing onsite stormwater management facilities to comply with Core Requirement #5. If these prescriptive methods for facility sizing are used, an engineered plan is not required but all calculations, plans, and supporting documents still must be provided with the submitted Abbreviated Drainage Plan.

Application Intake

Please use the attached intake checklist and content checklists to confirm all necessary components of the Abbreviated Drainage Plan are included with your submittal. Missing or incomplete items may result in the denial of your application. Items appearing on this list should be understood to meet stormwater plan and report requirements appearing on land development permit applications when an Abbreviated Drainage Plan is allowed.

Complete Drainage Control Plan and Abbreviated Drainage Plan requirements are listed in Volume I, Chapter 3 of the DDECM. Information on meeting Core Requirement #5 – On-Site Stormwater Management associated with Low Impact Development techniques can be found in Volume I, Section 2.5.5 of the DDECM. *Revised 09/18*

For more information or clarification of stormwater requirements within the City of Olympia:

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Olympia

Abbreviated Drainage Plan

Application Intake Checklist

Staff Use	**Permit Number:**	**Date Received by City:**
Project Information		
Project Name:		
Site Address:		
Assessor's Parcel Numbers:		
Applicant Information		
Name:		
Email:		
Phone:		
Authorized Representative or Engineer		
Name:		
Company:		
Email:		
Phone:		

Abbreviated Drainage Plan Completeness Checklist:

Applicant Use	Plan Component	Staff Use
❑	Site Development Drawings *(i.e. site plans, construction plans, etc.)*	❑
❑	Written Summary	❑
❑	On-Site Soils Report	❑
❑	Construction Stormwater Pollution Prevention Plan *(Short-Form)*	❑

Comments (staff use only):

Abbreviated Drainage Plan

Site Development Drawings – Content Checklist

Site Development Drawings must follow the format and content requirements of *Section 3.2.6 Abbreviated Drainage Plan – Site Development Drawing Requirements* in Volume I of the 2016 Drainage Design and Erosion Control Manual (DDECM). The content checklist below is provided to assist applicants and engineers in preparing a stormwater design drawings that address the requirements of that section. Site Development Drawings for construction purposes (i.e., construction drawings or construction plans) submitted to the City of Olympia for permit review shall also conform to the design and drafting requirements found in Chapter 3 of the City of Olympia Engineering Design and Development Standards (EDDS). It is the project engineer's responsibility to prepare plans conforming to all City standards (DDECM and the EDDS). *Drafting standards and requirements found in the EDDS shall prevail where there is conflict with this checklist.*

Project Name: _____ **Date:** _____

Applicant Use	***Item Description***	***Staff Use***
MINIMUM DRAWING REQUIREMENTS *(applies to all stormwater plan sheets)*		
❑	Name, address, telephone number, and email address of the applicant	❑
❑	Name, address, telephone number, and email address of the person preparing the plan	❑
❑	Name, address, telephone number, and email address of the contractor, if known	❑
❑	Parcel number(s)	❑
❑	Engineer's scale and north arrow	❑
❑	Legend if symbols are used	❑
❑	Property boundaries, dimensions, and area	❑
❑	Contour lines sufficient to determine contributing areas and drainage basins on NAVD88 datum	❑
❑	Adjoining street names	❑
❑	The location and type of any onsite stormwater management BMPs (e.g., soil amendment, infiltration trenches, dispersion, rain gardens, permeable pavement, etc.)	❑
❑	The location and type of construction stormwater pollution prevention BMPs used for erosion and sediment control	❑
❑	The location and type of other construction stormwater pollution prevention BMPs (such as refueling areas)	❑
❑	Location, type, size, and slope of stormwater conveyance systems for runoff from structures	❑
❑	Notes, specifications, and details related to selected BMPs	❑

Applicant Use	*Item Description*	*Staff Use*
MINIMUM DRAWING REQUIREMENTS, continued *(applies to all stormwater plan sheets)*		
❑	Existing and proposed structures and other hard surfaces such as driveways, patios, etc.	❑
❑	Location of onsite sewage disposal systems and reserve areas	❑
❑	Existing and proposed easements	❑
❑	Established buffers, significant trees, Soil and Vegetation Protection Areas, tree tracts, and natural vegetation easements	❑
❑	Natural drainage channels, wetlands, canyons, gullies, water bodies, etc.	❑
❑	Clearing limits	❑
❑	Areas to be graded, filled, excavated, or otherwise disturbed	❑
❑	Location of known wells, and underground storage tanks	❑
❑	Proposed location(s) determined for stockpiled materials, i.e., excavation wastes	❑
❑	Location and details of construction entrance	❑
❑	Earthwork and clearing requirements and notes of OMC Chapter 16.48	❑
❑	Applicable standard driveway approach detail (driveway approaches shall be constructed or reconstructed to meet the requirements of EDDS Chapter 4)	❑
❑	Proposed slopes, grades and elevations for driveway culvert installation, including spot elevations for ditch/swale flow line, edge of pavement, onsite driveway, and culvert inverts	❑
❑	Location of stormwater dispersion areas, pipe outfalls, and dispersion BMPs	❑
❑	Building setbacks from property lines	❑
❑	Tree retention and protection notes and details	❑
❑	Standard erosion and sediment control notes, including seasonal work limitations	❑

Applicant Use	*Item Description*	*Staff Use*
ADDITIONAL DRAWING REQUIREMENTS *(when applicable)*		
❑	Existing public and private development, including utility infrastructure on and adjacent to the site if publicly available	❑
❑	Minor hydrologic features, including seeps, springs, closed depression areas, and drainage	❑
❑	Major hydrologic features including streams, wetlands, and water bodies, as well as wetland and buffer boundaries and classifications	❑
❑	Flood hazard areas on or adjacent to the site	❑
❑	Geologic hazard areas and associated buffer requirements on or adjacent to the site	❑
❑	Aquifer and wellhead protection areas on or adjacent to the site	❑
❑	Topographic features that may act as natural stormwater storage, infiltration, or conveyance	❑
❑	Locations of soil surveys, soil test pits, and soil borings conducted as part of the required soils report.	❑

Abbreviated Drainage Plan

Written Summary – Content Checklist

The **Written Summary** included with an Abbreviated Drainage Plan must follow the format and content requirements of *Section 3.2.3 Abbreviated Drainage Plan – Written Summary, Supporting Documents, and Calculations* in Volume I of the 2016 Drainage Design and Erosion Control Manual (DDECM). The content checklist below is provided to assist applicants and engineers in preparing a complete Written Summary that addresses the requirements for a project. It is the applicant or applicant engineer's responsibility to prepare a Written Summary and plans meeting the requirements of the DDECM. The applicant should verify all items have been addressed or included in the summary.

Project Name: _____ **Date:** _____

Applicant Use	*Item Description*	*Staff Use*
WRITTEN SUMMARY		
❑	Proposed project extent and improvements are described in the summary, including tabulation of new and replaced hard surface and land disturbing activity areas	❑
❑	Evaluation of existing site conditions, vegetation, and level of development on-site	❑
❑	Core Requirements 1 through 5 are identified and with explanation of how the project complies with each requirement	❑
❑	Evaluation and discussion of construction stormwater (i.e. erosion and sediment control) methods and BMPs proposed for the site to comply with Core Requirement #2; References to anticipated construction schedule, requirement for coverage under Ecology's Construction Stormwater General Permit if applicable, and other construction concerns should be included in the summary	❑
❑	Documentation of operational and structural pollution source control BMPs for the site to comply with Core Requirement #3 *(this is separate from erosion control and construction stormwater management)*	❑
❑	Evaluation of existing onsite and offsite, downstream drainage courses (manmade and natural) to comply with Core Requirement #4	❑
❑	Existing drainage issues on the site and downstream of the site are identified	❑
❑	Receiving water for stormwater runoff from the site is identified	❑
❑	Citation of site conditions that render specific LID BMPs infeasible (if using the prescriptive list option of Core Requirement #5)	❑
❑	Justification for selection of chosen LID BMPs and whether the prescriptive list option or the LID performance standard option has been used to meet Core Requirement #5	❑
❑	Justification showing flow dispersion and infiltration BMPs meet the requirements of Volume III and Volume V of the DDECM	❑

Applicant Use	*Item Description*	*Staff Use*
DESIGN CALCULATIONS		
❑	Calculations are provided for all proposed stormwater BMPs, and stamped by a licensed civil engineer (unless the prescriptive lists are used)	❑
❑	Stormwater facility modeling completed with an approved hydrologic model (i.e. WWHM or MGS-Flood) (only required when using LID performance standard option for Core Requirement #5)	❑
❑	If prescriptive list #1 for Core Requirement #5 is used, all BMP design checks are included and summarized in the Written Summary	❑
SOILS REPORT AND INVESTIGATIONS		
❑	Soil testing and evaluation complies with Section 3.3, Volume III, DDECM	❑
❑	Confirmation of SCS/NRCS soil series mapping and Hydrologic Soil Group for the on-site soils	❑
❑	Soils testing completed by a qualified professional (see Ch. 3, Volume III, DDECM)	❑
❑	Design infiltration rates determined by grain size analysis and correct equations and factors (i.e. K_{sat}, K_{equiv}, f_{design})	❑
❑	Depth to groundwater (i.e. any saturated soil stratum including perched groundwater conditions) identified on soil logs	❑
❑	Depth to confining soil layers identified on logs or in report or results of testing for a hydraulic restriction layer (groundwater , soil with less than 0.3 in/hr infiltration rate, bedrock, etc.)	❑
❑	If onsite stormwater flows may result in shallow subsurface lateral flow (interflow), the conveyance and possible locations where the interflow may resurface (e.g. groundwater seeps) is assessed by a professional engineer, geologist, hydrogeologist, or engineering geologist registered in the State of Washington	❑
❑	Identification of any native soil and vegetation protection areas (SVPAs) on site	❑
❑	Identification of any steep slopes, contaminated soils, or other sensitive soil areas	❑
❑	Discussion of soil suitability for proposed LID, treatment, or flow control BMPs	❑