

EXHIBIT A – OPTION 4**SCOPE OF WORK****PORT LUDLOW DRAINAGE DISTRICT
STORMWATER FACILITY PLAN
Option 4 –Facility Plan**

The Port Ludlow Drainage District Stormwater Comprehensive Plan (“Plan”) was last updated in 2003, and the District is now seeking professional services to revise and update the Plan. The updated Plan will consist of a facility inventory, and will not include much of the additional non-District-specific information that was documented in the prior Plan. The organization of the proposed Facility Plan will be as follows:

Executive Summary
Chapter 1 – Introduction
Chapter 2 – Drainage Area Characterization
Chapter 3 – Existing Stormwater Drainage System
Chapter 4 – Asset Management Inventory
Chapter 5 – Operations and Maintenance
Chapter 6 – Capital Improvement Plan

The estimated cost to do this work is based upon the hours and rates provided in Exhibit B and upon completion of the specific tasks identified below.

TASK 1 – PROJECT MANAGEMENT AND QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

Provide overall project management and oversight services to include:

- Procuring sufficient staff resources to dedicate to the project.
- Managing and controlling project budget and schedule.
- Managing and providing monthly progress reports and invoices.
- Coordinating with District staff.
- Conduct periodic (50% and 90%) Quality Assurance/Quality Control (QA/QC) reviews of the Plan documents to check accuracy, completeness, and conformance with project criteria. Provide this review by both project and non-project engineers, experienced in similar comprehensive Plans. Document the review comments and revise the documents to incorporate these comments.

TASK 2 – STORMWATER INFRASTRUCTURE MAPPING

The District's current CAD-based map will be converted to a GIS format, but no detail regarding facilities will be incorporated into the GIS database. The mapping will be limited to the extent needed to produce useful figures for the purpose of producing the updated Plan.

Deliverables:

- PDF figures showing existing stormwater facilities.
- Inventory of existing stormwater facilities based upon available mapping.

TASK 3 – DRAINAGE AREA CHARACTERIZATION

Gray & Osborne will review the drainage area characterization provided in the prior Plan and incorporate any changes to the analysis. These may include adjustments to drainage basin boundaries due to newer infrastructure, changes to the assumed impervious coverage in each basin as a result of development over the past 20 years, and updated critical area boundaries based on County mapping. Gray & Osborne will use readily available topographic information (i.e., LIDAR), rainfall data, soil information, land use, existing stormwater infrastructure, and other associated GIS-based data to review delineation of the drainage basins within the District created for the prior Plan. The information will be supplemented with that collected in Task 2 and included within the Drainage Area Characteristics chapter to include the following information:

- Drainage basins
- Frequently flooded areas
- Waterways and waterbodies
- Water quality
- Topography
- Geology
- Soils
- Climate/Precipitation data
- Known critical areas
- Existing and future land use and zoning

Deliverables:

- Chapter 1 – Introduction
- Chapter 2 - Drainage Area Characterization

TASK 4 – EXISTING DRAINAGE SYSTEM DESCRIPTION

Gray & Osborne will conduct an analysis of the existing drainage facilities within the District. A list and map of the District's existing facilities will be provided with descriptions of each facility, and details regarding installation date, materials, and other information will be provided to the extent possible.

Using information from the previous Stormwater Management Plan, Gray & Osborne will work with the District to identify portions of the drainage network that are known or suspected to have insufficient capacity for adequate runoff management.

Revised modeling results will not be provided. The modeling results from the last Plan will be summarized in the Facility Plan to identify any areas of the system that may be deficient based on prior analysis. These areas will be documented in the Facility Plan. Areas of the existing system that are in need of improvement will be addressed in the Capital Improvement Plan in Chapter 6. Parts of the District's service area that may pose problems in the future will be identified based on staff knowledge. These areas will be documented and potential projects to resolve the potential drainage concerns will also be identified in the Capital Improvement Plan.

Deliverables:

- Chapter 3 – Existing Stormwater Drainage System

TASK 5 – ASSET MANAGEMENT INVENTORY

Using the information developed in Task 4, Gray & Osborne will create an asset management inventory to document the age and condition of the existing system facilities. This will include up to two site visits for engineers to inspect and photograph the system facilities. Age of facilities will be based on the best information available, which may include record drawings, prior reports and memos, staff knowledge, etc. Recommendations for asset management including the anticipated lifespan of existing improvements will be provided. Asset management recommendations including an assessment of the anticipated lifespan of facilities and timing of replacement facilities as needed will be provided. This inventory will include the following, to the extent possible:

- Installation date;
- Facility condition;
- Life expectancy;
- Replacement costs;
- Annual depreciation costs;
- Analysis of criticality.

Deliverables:

- Chapter 4 – Asset Management Inventory

TASK 6 – OPERATION AND MAINTENANCE PROGRAM

Gray & Osborne will review the current operation and maintenance procedures with staff and provide recommendations as necessary. Gray & Osborne will use information gathered during site visits identified in Task 2 to assess the condition of critical infrastructure within the District. The following specific tasks will be completed:

1. Identification of the current level of maintenance and effectiveness of District-owned systems through discussions with District staff.
2. Review of the District's maintenance schedule and associated costs for performing and/or enhancing facility maintenance.

Deliverables:

- Recommended operation and maintenance program including frequency of activities and budget, and asset management recommendations.
- Chapter 5 – Operation and Maintenance

TASK 7 – CAPITAL IMPROVEMENT PLAN

Identify potential structural and non-structural solutions to correct the conveyance system and water quality problems identified in Tasks 4 through 6, including:

1. Propose facility improvements based on District input and facility condition assessments including detailed description of the problems, the solutions, and costs.
2. Review the status of projects identified in the prior Plan and incorporate any projects that have not yet been completed but are still necessary.
3. Identify areas to watch that may be subject to drainage problems in the future. Several of these areas may include:
 - a. Foster Ravine
 - b. Incised drainage to the west of Foster Lane (from Pioneer Drive and approximately McCurdy Lane, to the west side of the fire station)
 - c. Outfall at the Marina
 - d. Drainage along the southwest edge of the fire station

Based on the improvements recommended in this and previous tasks, Gray & Osborne will propose a schedule and priority of capital improvements for the 6-year and 20-year Planning horizon. The priorities will be based upon a ranking system developed jointly by Gray & Osborne and District staff.

Deliverables:

- Capital Improvement Plan (Chapter 6) including recommended structural and non-structural projects, estimated costs, and schedule.
- Provide exhibits, pictures, handout materials, etc., for public workshops.

TASK 8 – COMPILE DRAFT STORMWATER FACILITY PLAN UPDATE

Gray & Osborne will compile the work performed under Tasks 1 to 7 to develop a draft Stormwater Facility Plan Update for review by District staff.

Deliverables:

- One electronic copy (PDF, GIS, CAD and other file and formats utilized in development of the Plan).

TASK 9 – PUBLIC MEETINGS

Gray & Osborne will assist the District in presenting the draft Plan in-person to the Commissioners and the public. This work assumes one meeting for the public and one meeting for the Commissioners. Gray & Osborne will review comments received from the public and the Commissioners and will generate responses to incorporate into the Plan. Following receipt of comments, Gray & Osborne will prepare a final Plan for review and acceptance by the County and District.

TASK 10 – COMPILE FINAL STORMWATER FACILITY PLAN

Gray & Osborne will compile the work performed under Tasks 1 to 9 to develop a final Stormwater Facility Plan for review by District staff.

Deliverables:

- One electronic copy (PDF, GIS, CAD and other file and formats utilized in development of the Plan).

We anticipate the following timeframe for completion of the tasks however this is subject to District staff's availability to review documents and provide background information:

Notice to Proceed.....November 2024
 Milestone 1:
 Introduction (Ch. 1) and Drainage Area Characterization
 (Ch. 2)January 2025

District Review of Milestone 1	February 2025
Milestone 2:	
Existing Stormwater Drainage System (Ch. 3) and Asset Management Inventory (Ch. 4)	April 2025
District Review of Milestone 2	May 2025
Milestone 3:	
Operations and Maintenance (Ch. 5) and Capital Improvement Plan (Ch. 6)	July 2025
District Review of Milestone 3	August 2025
Draft Facility Plan	September 2025
Public Meeting	September 2025
Final Facility Plan	October 2025

Assumptions for District Responsibilities

This scope of work assumes:

1. The County will be able to provide pertinent geographical information such as parcels, zoning, land use, etc. for use in the development of the Plan.
2. The District will provide complete and timely reviews (3 weeks) of all work submitted.
3. No assessment of regulatory considerations will be provided in the Plan.
4. Water quality assessment or concerns will not be assessed in the Plan.
5. The District will prepare the SEPA Checklist and will utilize District resources to advertise and publish all items related to the State Environmental Policy Act (SEPA), issue a threshold decision, and submit response to comments.
6. A financial review will not be provided in the Plan.
7. The District will advertise for and provide a facility for all public meetings and presentations to District Commissioners and the public.

EXHIBIT "B" - Option 4

ENGINEERING SERVICES SCOPE AND ESTIMATED COST

Port Ludlow Drainage District - Stormwater Facility Plan - Option 4

Tasks	Principal Hours	Project Manager Hours	Engineer-In-Training Hours	AutoCAD/ GIS Tech./ Eng. Intern Hours	Professional Land Surveyor Hours	Field Survey (2 person) Hours
1 Project Management and QA/QC	8	16	16			
2 Stormwater Infrastructure Mapping		2	8	16		
3 Drainage Area Characterization		4	16	16		
4 Existing Drainage System Description	4	8	16	8		
5 Asset Management Inventory		12	32	8		
6 O&M Program	8	8	20			
7 Capital Improvement Plan	12	28	32	8		
8 Compile Draft Plan	4	8	8	16		
9 Public Meetings		12	16			
10 Finalize Plan	4	6	8	8		
Hour Estimate:	40	104	172	80	0	0
Fully Burdened Billing Rate Range:*	\$150 to \$245	\$140 to \$245	\$100 to \$180	\$65 to \$175	\$125 to \$200	\$180 to \$310
Estimated Fully Burdened Billing Rate:*	\$220	\$210	\$135	\$145	\$190	\$250
Fully Burdened Labor Cost:	\$8,800	\$21,840	\$23,220	\$11,600	\$0	\$0

Total Fully Burdened Labor Cost: \$ 65,460

Direct Non-Salary Cost:

Mileage & Expenses (Mileage @ current IRS rate) \$ 500

TOTAL ESTIMATED COST: \$ 65,960

* Actual labor cost will be based on each employee's actual rate. Estimated rates are for determining total estimated cost only. Fully burdened billing rates include direct salary cost, overhead, and profit.