



Fort Lewis

Construction Storm Water Pollution Prevention Plan (CSWP3)

15 March 2004

<i>Public Works, Fort Lewis</i> <i>Environmental and Natural Resources Division</i>		
<i>Procedure: Construction Storm Water Pollution Prevention Plan (CWSP3)</i>		
<i>Document ID: (PWE-620)</i>		
<i>Document Owner:</i>	<i>Approval:</i>	<i>Revision:</i>
		<i>Revision Date:</i>
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Prepared for :
 Environmental and Natural Resources Division
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Glossary of Terms

BMP	Best management practice
CGP	Construction General Permit
EPA	U. S. Environmental Protection Agency
ESA	Endangered Species Act
FLEWS	Fort Lewis Environmental Water Section
NOI	Notice of Intent
NPDES	National Pollution Discharge Elimination System
SWP3	Storm Water Pollution Prevention Plan (Fort Lewis)
SWPPP	Storm Water Pollution Prevention Plan (Contractors)
	TMDL Total maximum daily load

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1.0 Introduction

1.1 Background. In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), to restore and maintain the quality of the nation's waterways. The ultimate goal was to make sure that rivers and streams were fishable, swimmable, and drinkable. In 1987, the Water Quality Act (WQA) added provisions to the CWA that allowed the EPA to govern storm water discharges from construction sites. In 1998, EPA published the final notice for General Permits for Storm Water Discharges from Construction Activities Disturbing 5 Acres or Greater (63 Federal Register 7898, February 14, 1998). The general permit includes provisions for development of a Storm Water Pollution Prevention Plan (SWPPP) to maximize the potential benefits of pollution prevention and sediment and erosion control measures at construction sites.

1.2 Purpose. To meet the requirement of the Construction General Permit (CGP) for a storm water pollution prevention plan. This Fort Lewis Storm Water Pollution Prevention Plan (SWP3) implements the basic storm water pollution plan for the installation. It will be supplemented to address specific storm water pollution concerns at future known and unknown construction sites. Development, implementation, and maintenance of supplemental SWPPPs for each construction site will reduce soil erosion and minimize pollutants in storm water during construction.

1.3. Responsibilities.

a. As the property owner Fort Lewis is responsible for obtaining the CGP and implementing the SWP3.

b. For purposes of this CGP the lead construction activity at each construction site is considered the operator of the project and is responsible for:

(1) Complying with the requirements of the Fort Lewis SWP3.

(2) The preparation, implementation and enforcement of supplemental Storm Water Pollution Prevention Plans (SWPPPs) for construction sites. Appendix A contains the detailed requirements for a supplemental SWPPP and a sample plan. Separately the Fort Lewis Environmental Water Section (FLEWS) will provide a copy of the sample plan in Microsoft Word format that can be used as the basis to prepare a supplemental SWPPP

c. The SWP3 and the supplemental SWPPPs will collectively:

(1) Define the characteristics of each site and the type of construction that will occur

(2) Describe the site plan for each facility to be constructed

(3) Describe the practices that will be implemented to control erosion and the release of pollutants to storm water

(4) Create an implementation schedule to ensure that the practices described in each supplemental SWPPP are in fact implemented and to evaluate the plan's effectiveness in reducing erosion, sediment, and pollutant levels in storm water discharged from the site

(5) Describe the final stabilization/termination design to minimize erosion and prevent storm water impacts after construction is complete

1.4. Special Requirements

a. Storm water discharges from construction sites which discharge to surface waters listed as impaired under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH or phosphorus are subject to effluent limitations. Currently American Lake is the only impaired body of water on Fort Lewis. This designation is for high phosphorous content.

b. Storm water discharges from construction sites which discharge to surface waters for which there is a total maximum daily load (TMDL) that addresses sediment, turbidity, total suspended solids, high pH or phosphorus must be consistent with the requirements of the approved TMDL or control plan. Currently there are no bodies of water with a TMDL or control plan on Fort Lewis.

c. Storm water discharges must not cause or contribute to a violation of the standards established in the following:

- (1) WAC 173-200 Groundwater quality standards
- (2) WAC 173-201A Surface water quality standards
- (3) WAC 173-204 Sediment Management standards

d. Storm water discharges must not be in excess of the human health-based criteria contained in the National Toxics Rule.

e. The design of all storm water collection, conveyance, treatment and infiltration must be in accordance with Washington Department of Ecology Stormwater Management Manual for Western Washington (August 2001)

2.0 SWP3 Coordinator and Duties

2.1 SWP3 Coordinator and Team

a. The construction SWP3 Coordinator and Team for Fort Lewis are as follows:

(1) Coordinator: Water Team Lead, Environmental Compliance Branch, Environmental and Natural Resources Division of Public Works.

(2) Team member: Storm Water Technician, Water Program Office, Environmental Compliance Branch, Environmental and Natural Resources Division of Public Works.

2.2 Responsibilities. The SWP3 Coordinator will:

- a. Prepare and implement the SWP3
- b. Oversee maintenance practices identified as BMPs in the SWP3
- c. Implement and oversee employee training

2.3 Duties. The SWP3 Coordinator with the assistance of the SWP3 Team will

- a. Conduct or provide for inspection and monitoring activities
- b. Identify other potential pollutant sources and ensure they are added to the plan
- c. Identify any deficiencies in the SWP3 and ensure they are corrected

3.0 Site Location and Maps

3.1 General Description. Fort Lewis is located eleven miles south of the Tacoma City limits along Interstate Highway 5. A general map of the area is at Figure 2-1.

3.2 Industrial Activity. Various industrial activities are conducted at Fort Lewis. These include:

a. The Defense Reutilization and Marketing Office conducts hazardous waste storage and disposal operations. This includes serving as a collection point for hazardous waste and off-post disposal of the waste.

b. Operation of a cannibalization point for motor vehicles and motorized equipment by the Directorate of Logistics. This includes serving as a collection point for equipment no longer economically repairable and the removal of batteries, fluids and parts from that equipment.

c. The Defense Reutilization and Marketing Office conducts scrap recycling operations. This includes serving as a collection point for scrap material and the disposal of the scrap off-post. The Directorate of Logistics collects brass from expended ammunition for recycle. This activity is conducted at the Ammunition Supply Point.

d. The Directorate of Logistics primarily conducts transportation and warehousing operations. Shipments of supplies, equipment and material are received by truck delivery. These items are then warehoused in either open or closed storage until delivered to the customer. Transportation of supplies and equipment within Fort Lewis is conducted using both military and civilian trucks.

e. Fort Lewis operates a marina for recreational purposes on American Lake. There is no conveyance for storm water at this site. The only stormwater conveyances at the site are two small discharge pipes for a parking lot which does not qualify as an industrial site.

f. Airfield operations are conducted and Gray Army Airfield. These activities include the maintenance and refueling of aircraft.

3.3 Industrial Storm Water Outfalls. The Fort Lewis storm water outfalls are identified on the Outfall map at Figure 2-2. Each outfall is further described below.

a. Outfall 2 – DuPont Gate. Outfall 2 discharges storm water from the main cantonment area, including the southern portion of Gray Army Airfield. The drainage area of Outfall 2 covers 1,928 acres with approximately 1,010 acres of impervious surface. Discharge is through an oil water separator to Bell Marsh with final discharge into Puget Sound via the storm water that drains northwesterly into Puget Sound near Solo Point.

b. Outfall 3 – Flora Road. Outfall 3 discharges storm water from the main cantonment area including the northern portion of Gray Army Airfield. The drainage area covers 1,675 acres with approximately 617 acres of impervious surface. Discharge is through an oil water separator

to Hamer Marsh with final discharge into Puget Sound via the storm water that drains northwesterly into Puget Sound near Solo Point.

c. Outfall 4 – Solo Point Road. Outfall 4 discharges storm water from the northern portion of North Fort. It serves a drainage area of 616 acres with about 300 acres of impervious area. Discharge is to the storm water canal that drains northwesterly into Puget Sound near Solo Point.

d. Outfall 5 – I Street. Outfall 5 discharges storm water from the southern portion of North Fort. The drainage area covers 401 acres with approximately 180 acres of impervious area. Discharge is through an oil water separator to the storm water canal that drains northwesterly into Puget Sound near Solo Point.

e. Outfall 7 – Logistics Center. Outfall 7 discharges storm water from the Logistics Center area. The drainage area of Outfall 7 covers 131 acres with approximately 95 acres of impervious area. Discharge is to Murray Creek through an oil water separator.

f. Outfall 9 – Kennedy Marsh. Outfall 9 discharges storm water from a vehicle maintenance facility (building 3390). The drainage area of the outfall is eight acres with the majority of the area being surfaced with asphalt or gravel. Discharge is to Kennedy Marsh through an oil water separator.

g. Outfall 11 – DRMO. Outfall 11 discharges storm water from the storage yards of DRMO and a portion of the Logistics Center. The drainage of the outfall is approximately 158 acres of which 80 acres is impervious surface. Discharge is to Murray Creek.

3.4 Residential Storm Water Outfalls. There are numerous storm water outfalls that discharge into American Lake. The only outfall of any size is the one located at the American Lake Club (See Figure 2-2).

3.5 Receiving Waters and Wetlands. The storm drainage system primarily accommodates runoff from the major built-up areas: North Fort, the main cantonment area, and the Logistics Center. The drainage of these areas is generally to the north with discharges into Puget Sound. Within the drainage basin are American Lake and Sequalitchew Creek, Sequalitchew Creek, Bell Marsh, Hamer Marsh, Kennedy Marsh and Murray Creek. Sequalitchew Creek is the major drainage channel for American and Sequalitchew Lakes. A storm water drainage canal on North Fort conveys the discharges into Puget Sound. Storm water from those residential areas that are not in an industrial drainage basin is conveyed to American Lake. A map of the receiving waters and wetlands is at Figure D-3. The receiving waters and wetlands are described below.

a. Murray Creek. Water for this stream almost exclusively originates from groundwater springs with additional flow coming from storm water detention ponds. The headwaters for Murray Creek are located in the northeast section of Fort Lewis and flows for approximately two miles before entering American Lake. It flows through a developed area of Fort Lewis that includes the logistics center, old and new Madigan Hospital complexes, and Camp Murray Army Reserve Center. Murray Creek supports a resident population of cutthroat trout, and the lower

portion of the stream is occasionally used as spawning habitat by kokanee salmon. Flow measurements taken from April 1995 to August 1996 near the mouth of the stream, showed a range in flow from a low of 0.1 cfs to a high of 9.5 cfs.

b. Sequalitchew Creek. Sequalitchew Creek receives the majority of its' flow from Sequalitchew Lake, and is approximately 2.5 miles long, flowing through two marshes before draining directly into Puget Sound. Sections of the stream become intermittent during the summer months. The lower three miles of Sequalitchew Creek flows through the City of DuPont and privately held properties including Weyerhaeuser, Intel, and residential lands. The total drainage basin of Sequalitchew Creek is 38.4 square miles. Chum and coho salmon utilize the lower reach for spawning, but have not been observed upstream of Sequalitchew Canyon.

c. American Lake. American Lake is the largest natural lake in Pierce County, covering approximately 1,025 acres. The water source for this lake is primarily from ground water and Murray Creek. The mean depth of the lake is 53 feet and the deepest portion at the northern end reaching a maximum depth of 90 feet. American Lake is classified as a mesotrophic (moderately productive) lake with symptoms of accelerated eutrophication due to increasing amounts of nutrient loading. The lake is used quite extensively for recreational fishing. It supports populations of kokanee, cutthroat trout, rock bass, pumpkinseed, rainbow trout, and yellow perch. The lake also provides critical habitat for migrating waterfowl as well as supporting a significant nesting population. Both nesting and wintering bald eagle populations forage on the lake for both fish and waterfowl. American Lake is also used quite extensively for water training exercise by certain military units, and includes parachute drops and survival skills while in water.

d. Sequalitchew Lake. Sequalitchew Lake is approximately 80 acres in size and is located within the north Fort Lewis portion of the installation. The primary source of water for this lake is a major spring at the eastern end of the lake. The lake tends to be rather shallow averaging approximately six feet in depth. During the warmer months of the year the water column is typically full of vegetation composed of both floating and sub-mergent vegetation. Emergent vegetation is restricted to near shore areas and is dominated by cattails. Sequalitchew Lake supports several species of warm water spiny ray fish that include large mouth bass, blue gill, pumpkinseed, yellow perch, and rock bass. It also is used quite extensively by waterfowl and occasionally as a foraging site for nesting and wintering bald eagles. This lake is not only used for recreational purposes such as fishing, but is also an important training site, representing one of two sites used for swimming military equipment approved for aquatic use.

e. Lynn Lake. Lynn Lake is located near Madigan Hospital, within the developed portion the installation. It is approximately three acres in size. The lake contains very little open water during the growing season with the majority of the lake classified as aquatic bed and a minor portion as scrub shrub. The lake does support brown bullheads, but has not been surveyed for fish populations for several years. It receives some use by waterfowl during the nesting season, including Canadian geese, hooded mergansers, and wood ducks. The primary source of water for this wetland is groundwater.

f. Bell Marsh. Bell Marsh is located in the North Fort portion of the installation. It is approximately 13 acres in size with very little open water. The wetland is classified almost

evenly between emergent and scrub shrub. There are no records of any fish species inhabiting this body of water. This wetland receives the majority of its water supply from groundwater.

g. Hamer Marsh. Hamer Marsh is located in the North Fort Lewis portion of the installation and is approximately 63 acres in size. The majority of the wetland is classified as scrub shrub with only minor amounts of open water. There are no records of fish inhabiting this body of water, but it is used by various species associated with wetlands, including species of waterfowl, amphibians, and mammals. The primary source of water for this wetland is groundwater.

h. Kennedy Marsh. Kennedy Marsh is located in a transitional area of the installation between the developed and non-developed areas. The marsh is approximately 12 acres in size and is classified as scrub. The wetland is completely covered with various shrub species typically associated with wetland habitat. There are no records of fish residing in this wetland and waterfowl use is limited due to the dense shrubby vegetation. The primary source of water for this wetland is storm water and groundwater. This is a closed system with no surface outlet.

i. Puget Sound. Puget Sound is an inland expression of the Pacific Ocean of which it is hydrologically connected via the Strait of Juan de Fuca. Portions of Fort Lewis lie adjacent to Puget Sound and all riverine systems on the installation flow either directly into Puget Sound, or indirectly by providing water to other riverine systems that eventually flow into Puget Sound. Near shore habitat provides critical habitat to salmonid fry and various marine mammals. In addition to supporting several species of salmon, Puget Sound also supports numerous types of shellfish and bottom fish.

3.6. Existing Fort Lewis Conditions.

a. The general topography of the Fort Lewis cantonment area is relatively flat to gently rolling, with isolated deposits of glacial material rising 100 to 200 feet above the surrounding area.

b. Specific site conditions are detailed in the individual supplemental SWPPPs to this document.

3.7 Runoff. There is no known runoff from adjacent property onto Fort Lewis.

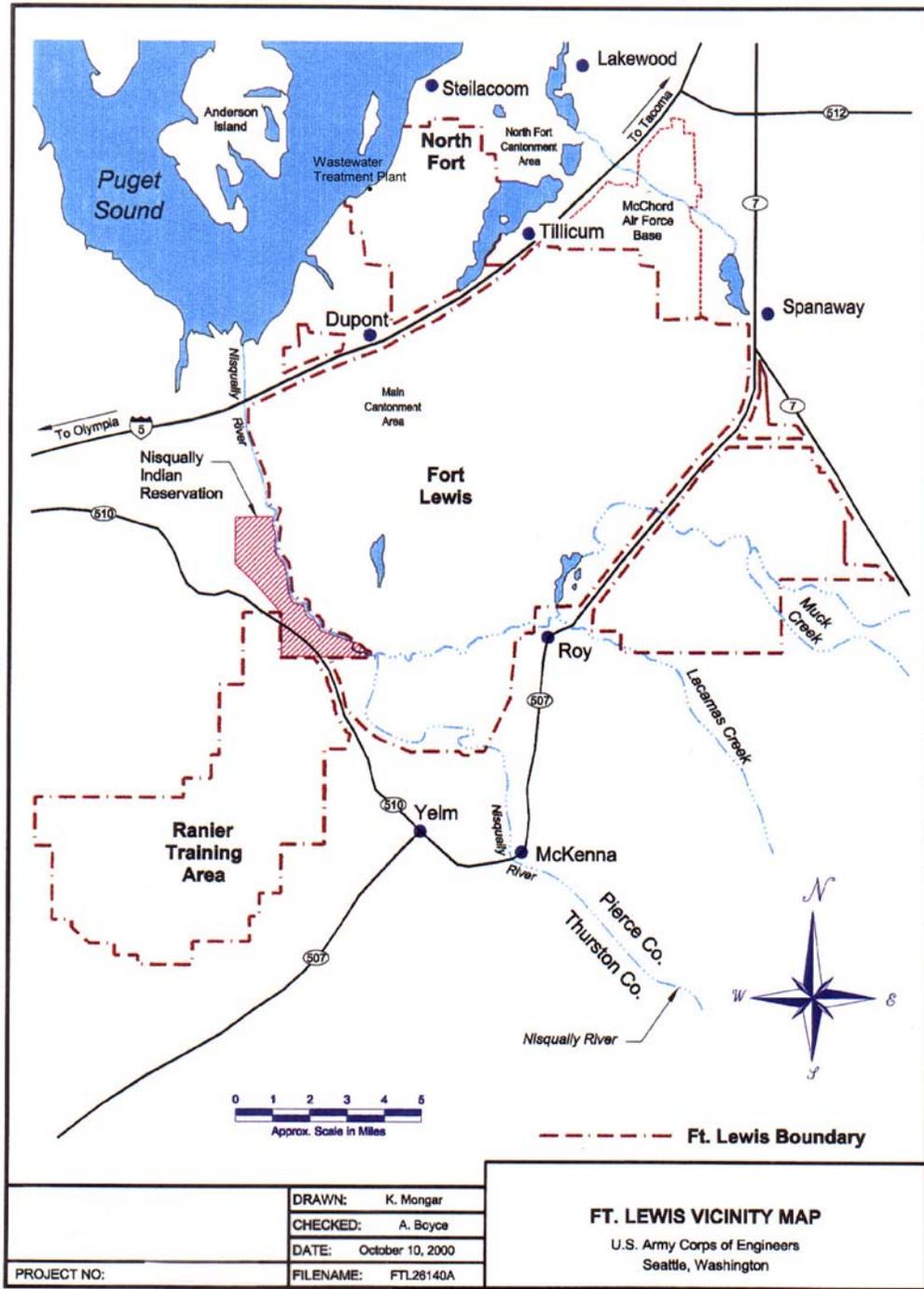


Figure 2-1. General Map of Fort Lewis Area.

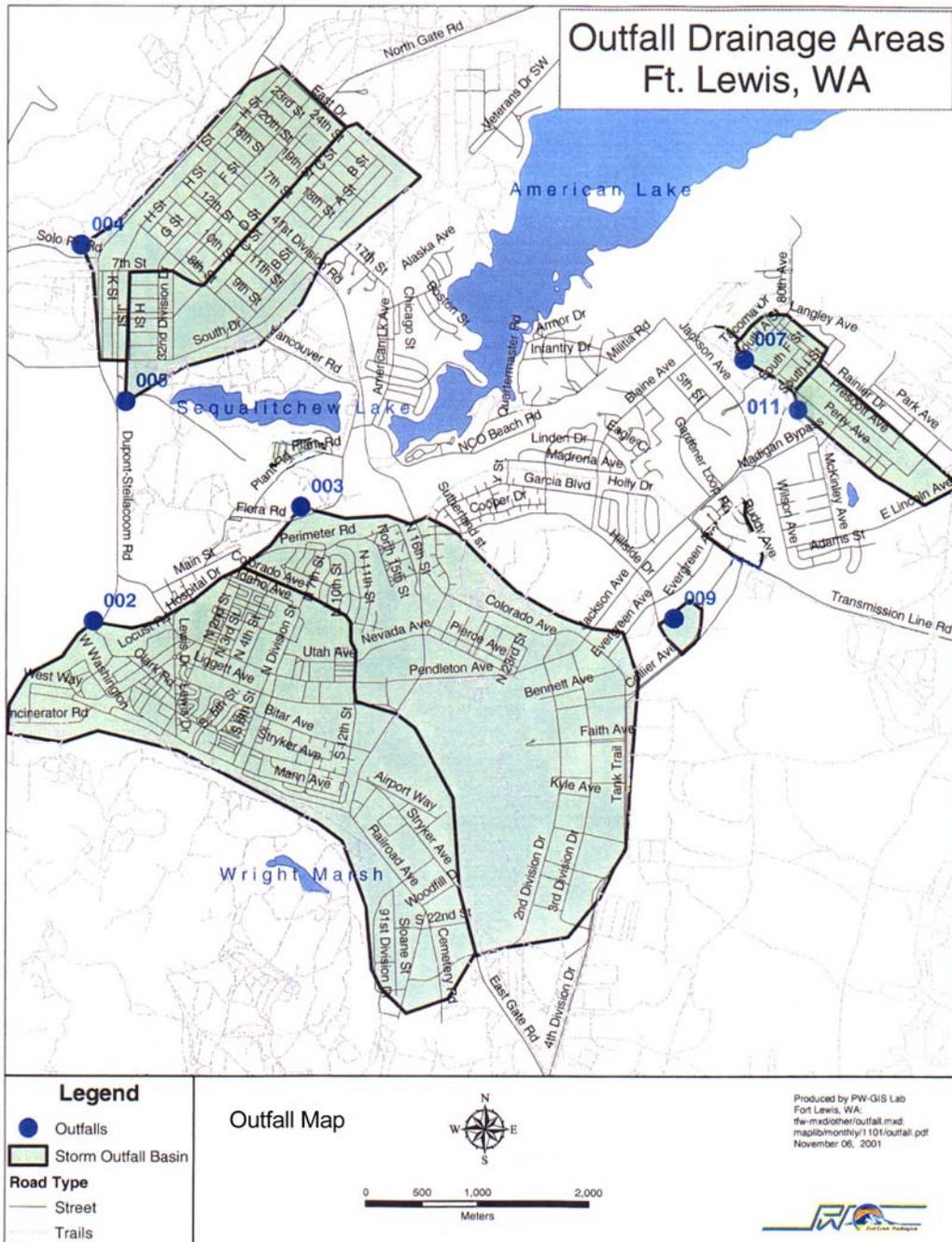


Figure 2-2. Fort Lewis Outfall Map.

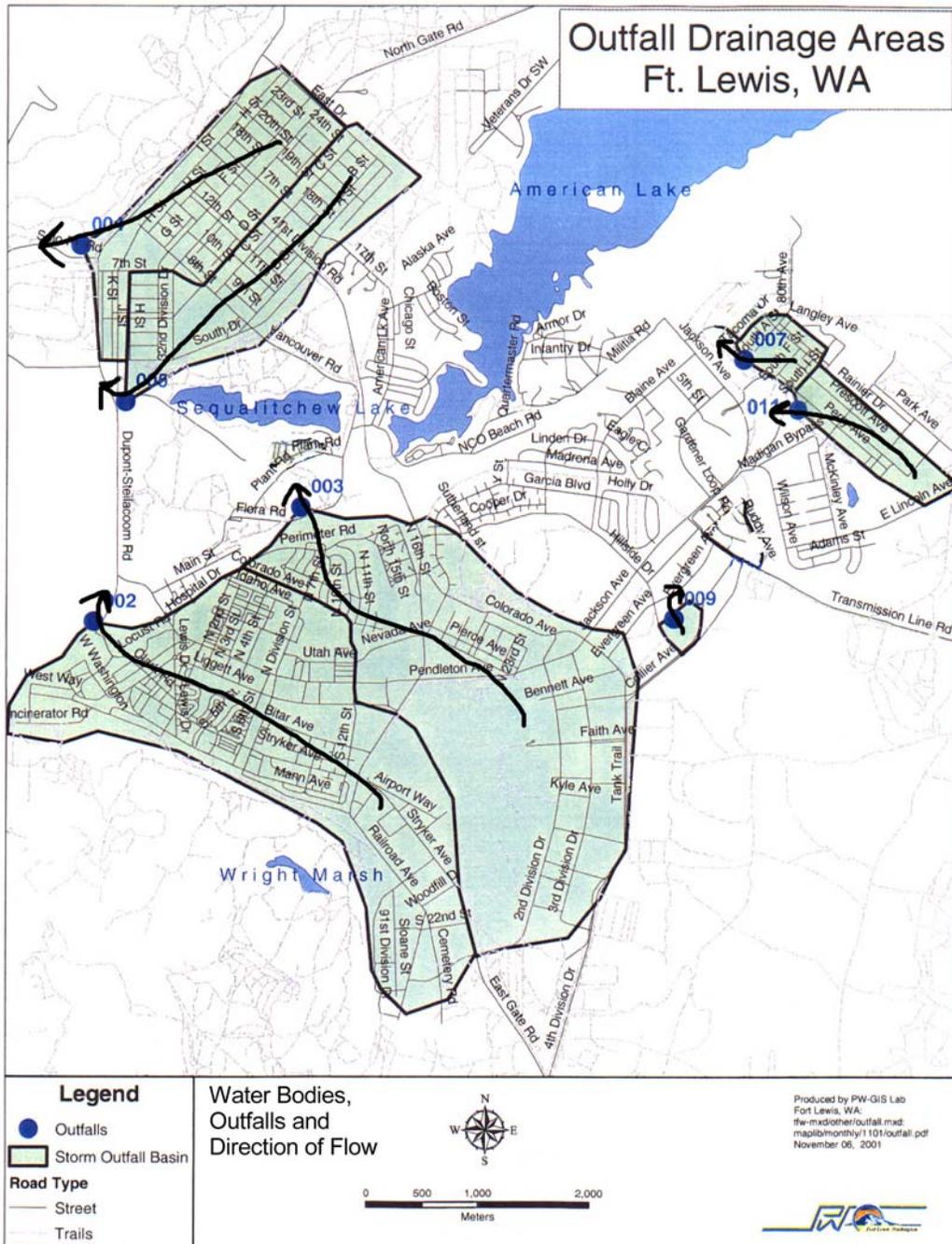


Figure 2-3. Fort Lewis Outfall Drainage Basins.

4.0 Identification of Potential Storm Water Contaminates

4.1 General.

a. Fort Lewis uses a wide range of products that include forms of alcohol, pesticides, fuels, lubricating oils, cleaning solvents and other petroleum based and synthesized products. Any such materials will be removed from a construction site prior to land disturbance.

b. There is the potential for soil to be contaminated by earlier spills. However, it is routine practice that any known soil contamination is remedied before construction is allowed on a site.

4.2 Significant Material Inventory. Significant material inventories for each construction site are detailed in the individual supplemental SWPPPs to this document.

4.3 Potential Areas for Storm Water Contamination. Potential areas for storm water contamination at each construction site are detailed in the individual supplemental SWPPPs to this document.

4.4 Summary of Available Storm Water Sampling Data. The FLEWS will make available to contractors any applicable storm water sampling data for their respective construction sites. The data, when available, will be included in the supplemental SWPPPs

4.5 Sampling Requirements. The FLEWS will advise the operator if sampling will be required of any storm water discharge. This will be a requirement only when the potential exists for the discharge to be in violation of Federal and State standards listed in paragraph 1.4c.

4.6 Documentation of Total Maximum Daily Loads (TMDLs). Currently there are no EPA-established TMDLs for bodies of water on Fort Lewis.

5.0 Storm Water Management Controls

5.1 General. Structural BMPs to control storm water and reduce storm water contamination are located throughout the cantonment area. Any structural BMP removed or rendered ineffective by construction activity must be replaced or other action taken to ensure there is no net increase in water flow, volume and contamination.

5.2 Temporary and Permanent Erosion Control Practices. Those temporary and permanent erosion control practices implemented at each construction site are detailed in the individual supplemental SWPPPs to this document.

5.3 Construction Practices to Minimize Storm Water Contamination. Construction practices to minimize storm water contamination at each construction site are detailed in the individual supplemental SWPPPs to this document.

5.4 Coordination of BMPs with Construction Activities. The construction or installation of BMPs will be coordinated with construction activities. Specific BMPs requiring coordination are:

- a. Any temporary perimeter controls (silt fences and straw bails) will be installed before any clearing and grading begins.
- b. Any clearing and grading will not occur in an area until it is necessary for construction to proceed.
- c. The stabilized construction site entrance will be constructed before clearing and grading begins.
- d. Any sedimentation basins will be constructed before clearing and grading begins.
- e. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch.
- f. After the entire site is stabilized, the accumulated sediment will be removed from the basin and the permanent geotextile membrane will be placed along the sides.
- g. The temporary perimeter controls (silt fencing and straw bails) will not be removed until all construction activities at the site are complete and soils have been stabilized.

5.5 Certification of Compliance with Federal, State and Local Regulations. This SWP3 was prepared in accordance with the NPDES Permit for Storm Water Discharges from Construction Activity. Other applicable Federal and State requirements, as listed in paragraph 1.4c are included in this plan.

5.6 Documentation of Permit Eligibility Related to Endangered Species. The FLEWS will obtain all documentation of eligibility related to endangered species and provide it to the operator for inclusion in the SWPPP.

6.0 Maintenance and Inspection Procedures

6.1 Inspections

a. Construction projects will be regularly inspected by a member of the Fort Lewis SWP3 Team to insure compliance with the SWP3 and the supplemental SWPPPs.

b. A written record of the inspection will be prepared and maintained by the FLEWS for a minimum of one year after project completion.

6.2 Employee Training. Members of the storm water team will receive at least one session of storm water related training annually.

7.0 Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



PAUL T. STEUCKE, JR.
Chief, Environmental and
Natural Resources Division

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Appendix A

SWPPP Requirements

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Appendix A – SWPPP Requirements

1.0 General

1.1 Background.

a. All storm water on construction sites is under the jurisdiction of the U. S. Environmental Protection Agency (EPA).

b. Fort Lewis submitted a Notice of Intent (NOI) for a Construction General Permit (CGP) to the Environmental Protection Agency (EPA) on 9 September 2003. EPA acknowledgement of the NOI dated 25 September 2003 assigned the number WA0001706 to the NOI. A copy of the NOI and acknowledgement are at Annex A.

c. The CGP obtained by the Fort Lewis NOI covers all construction projects on the Fort Lewis installation that result in a total land disturbance of one acre or more and which drain to a water body of the United States.

1.2 Allowable Storm Water Discharges

a. Storm water associated with construction activity

b. Discharges from support activities (e.g. concrete or asphalt batch plants, equipment staging yards, material storage areas) provided appropriate control measures are identified in the SWPPP covering discharges from the support activity

c. Discharges composed of allowable discharges listed above commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

1.3 Allowable Non-Storm Water Discharges:

a. Discharges from fire-fighting activities

b. Fire hydrant flushings

c. Waters used to wash vehicles where detergents are not used

d. Water used to control dust generated by a best management practice (BMP) used to prevent off-site tracking of sediments onto paved surfaces.

e. Potable water including uncontaminated water line flushings

f. Routine external building wash down that does not use detergents

- g. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used
- h. Uncontaminated air conditioning or compressor condensate
- i. Uncontaminated ground water or spring water
- j. Foundation or footing drains where flows are not contaminated with process materials such as solvents
- k. Uncontaminated excavation dewatering
- l. Landscape irrigation

1.4 Limitations on Coverage.

a. The CGP does not authorize post-construction discharges that originate from the site after construction activities have been completed and the site has achieved final stabilization including any temporary support activity.

b. The CGP does not authorize discharges mixed with non-stormwater except for discharges identified in paragraph 1.3. The SWPPP must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

1.5 Endangered and Threatened Species and Critical Habitat Protection

a. The CGP does not authorize any discharges that are likely to jeopardize the continued existence of any species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or result in the adverse modification or destruction of habitat that is federally-listed as critical under the ESA.

b. The CGP does not authorize any discharges that would cause a prohibited “take” of federally-listed as endangered or threatened under the Endangered Species Act (ESA).

1.6 Copies of Records. See paragraph 4-5b for those a list of those records which must be provided to the Fort Lewis Environmental Water Section (FLEWS).

1.7 Waivers for Construction Activity Disturbing Less than Five Acres. Waivers may be granted for construction activity that occurs solely during the months of June, July, August and September. Coordinate with the FLEWS to determine if your project qualifies.

2.0 Authorization for Discharges of Storm Water from Construction Activities

2.1 Policy. In compliance with the CGP Fort Lewis prepared a Storm Water Pollution Prevention Plan (SWP3). Under the provisions of this plan the lead organization, company or corporation (operator) at a construction site that will result in a total land disturbance of one acre or more shall prepare a Storm Water Pollution Prevention Plan (SWPPP) as a supplement to the SWP3.

2.2 SWPPP Approval and Authorization to Discharge Date. Supplemental SWPPPs must be approved by the FLEWS prior to any ground disturbance at the construction site. Failure to comply with this requirement will subject the offending organization to civil and criminal penalties imposed by the EPA

2.3 SWPPP Termination.

a. Once approved a SWPPP remains in effect until the following conditions are met:

(1) Final stabilization has been achieved on all portions of the site for which the operator is responsible

(2) Another operator has assumed control over all areas of the site that have not been finally stabilized, by preparing and obtaining approval of a SWPPP from the FLEWS.

(2) Coverage under an individual or alternative general NPDES permit has been obtained

b. A request to terminate the SWPPP must be submitted to the FLEWS within 30 days of one of the above conditions being met. Authorization to discharge terminates at midnight of the day the request is approved

2.4 Submitting a Termination Request

a. It is the operator's responsibility to submit a complete and accurate termination request using the form provided in Annex B (or a photocopy thereof)

b. The termination request must include the following:

(1) The basis for submitting the request. This must be one of the following:

(a) Final stabilization has been achieved on all portions of the site for which the operator is responsible

(b) Another operator has assumed control over all areas of the site that have not been finally stabilized

(c) Coverage under an alternative NPDES permit has been obtained

(2) The operator's name, address, telephone number and Employer Identification Number (EIN) as established by the U.S. Internal Revenue Service

(3) The name of the project and address (or a description of location if no street address is available) of the construction site for which the notification is submitted

(4) A certification statement, signed and dated by an authorized representative as defined in paragraph 3.12e and the name and title of that authorized representative

3.0 Storm Water Pollution Prevention Plan (SWPPP)

3.1 General

a. The operator must prepare a SWPPP in accordance with good engineering practices. The operator is defined as the lead organization, company or corporation at a construction site. A sample SWPPP is at Annex C.

b. The SWPPP must:

(1) Identify all potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the construction site.

(2) Describe the practices to be used to reduce pollutants in storm water discharges from the construction site.

(3) Assure compliance the requirements of the SWP3.

c. Once a definable area has been finally stabilized, this area can be marked on the SWPPP and no further SWPPP or inspection requirements apply to that portion of the site.

d. The SWPPP must be implemented as written from commencement of construction activity until final stabilization is complete.

3.2 Multiple SWPPPs

a. Normally there will be a single SWPPP prepared for a construction site by the operator. However, the lead operator may require or allow sub-operators to develop separate SWPPPs that cover only their portion of the project provided all SWPPPs are coordinated and consistent.

b. If there are multiple SWPPPs for a construction site the operator will submit them as a single package for approval by the FLEWS.

3.3 Site and Activity Description

a. The SWPPP must identify the operator and any sub-operators for the project site, and the areas of the site over which each has control.

b. The SWPPP must describe the nature of the construction activity, including:

(1) The type of project (e.g. barracks, gas station, etc.)

(2) The intended sequence and timing of activities that disturb soils at the site

(3) Estimates of the total area expected to be disturbed by excavation, grading, or other construction activities, including any dedicated off-site borrow and fill areas located on Fort Lewis.

(4) A general location map (e.g., USGS quadrangle map, a portion of a city or county map, or other map) with enough detail to identify the location of the construction site and waters of the United States within one mile of the site.

c. The SWPPP must contain a legible site map, showing the entire site, identifying:

(1) Direction(s) of storm water flow and approximate slopes anticipated after major grading activities

(2) Areas of soil disturbance and areas that will not be disturbed

(3) Locations of major structural and nonstructural BMPs identified in the SWPPP

(4) Locations where stabilization practices are expected to occur

(5) Locations of any off-site material, waste, borrow or equipment storage

(6) Locations of any waters of the United States (including wetlands)

(7) Locations where storm water discharges to a surface water

(8) Areas where final stabilization has been accomplished and no further construction permit requirements apply

(9) Any areas containing threatened or endangered species or critical habitat.

d. The SWPPP must describe and identify the location and description of any storm water discharge associated with industrial activity other than construction at the site. This includes storm water discharges from dedicated asphalt plants and dedicated concrete plants, that are covered by this permit.

3.4 Controls to Reduce Pollutants

a. The SWPPP must:

(1) Include a description of all pollution control measures (i.e., BMPs) that will be implemented as part of the construction activity to control pollutants in storm water discharges. For each major activity identified in the project description the SWPPP must clearly describe appropriate control measures, the general sequence during the construction process in which the measures will be implemented, and which operator is responsible for the control measure's implementation.

(2) Include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where possible and that disturbed portions of the site are stabilized. Use of impervious surfaces for stabilization should be avoided.

(3) Include a description of structural practices to divert flows from exposed soils, retain/detain flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.

(4) Include a description of all post-construction storm water management measures that will be installed during the construction process to control pollutants in storm water discharges after construction operations have been completed. Structural measures should be placed on upland soils to the degree practicable. Such measures must be designed and installed in compliance with applicable federal, local, state or tribal requirements.

(5) Describe measures to prevent the discharge of solid materials, including building materials, to waters of the United States.

(6) Describe measures to minimize, to the extent practicable, off-site vehicle tracking of sediments onto paved surfaces and the generation of dust.

(7) Include a description of construction and waste materials expected to be stored on-site with updates as appropriate. The SWPPP must also include a description of controls, including storage practices, to minimize exposure of the materials to storm water, and spill prevention and response practices.

(8) Include a description of pollutant sources from areas other than construction (including storm water discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

b. The following records must be maintained as part of the SWPPP:

(1) Dates when major grading activities occur

(2) Dates when construction activities temporarily or permanently cease on a portion of the site

(3) Dates when stabilization measures are initiated

3.5 Non-Storm Water Discharge Management. The SWPPP must identify all allowable sources of non-storm water discharges listed in paragraph 1.2, except for flows from fire fighting activities that are combined with storm water discharges associated with construction activity at the site.

- a. Non-storm water discharges should be eliminated or reduced to the extent feasible.
- b. The SWPPP must identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

3.6 Maintenance of Controls

- a. All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. If site inspections identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event, whenever practicable, to maintain the continued effectiveness of storm water controls.
- b. If existing BMPs need to be modified or if additional BMPs are necessary for any reason, implementation must be completed before the next storm event, whenever practicable. If implementation before the next storm event is impracticable, the situation must be documented in the SWPPP and alternative BMPs must be implemented as soon as possible.
- c. Sediment from any sediment traps or sedimentation ponds must be removed when design capacity has been reduced by 50 percent.

3.7 Documentation of Permit Eligibility Related to Endangered Species.

- a. The FLEWS will provide the necessary documentation of permit eligibility and instructions on measures to implement to protect federally-listed endangered or threatened species, or federally-designated critical habitat.
- b. The SWPPP must describe these measures and how they will be implemented.

3.8 Copy of Permit Requirements. Copies of the EPA CGP and the Fort Lewis NOI and SWP3 must be included with the approved SWPPP.

3.9 Applicable Federal, State, Tribal, or Local Programs

a. The SWPPP must be consistent with all applicable federal, state, tribal, or local requirements for soil and erosion control and storm water management, including updates to the SWPPP as necessary to reflect any revisions to applicable federal, state, tribal, or local requirements for soil and erosion control. Applicable requirements are contained in the documents listed below:

- (1) WAC 173-200 Groundwater quality standards
- (2) WAC 173-201A Surface water quality standards
- (3) WAC 173-204 Sediment Management standards

b. The following documents are also applicable to any construction projects on Fort Lewis:

(1) Discharges must not be in excess of the human health-based criteria contained in the National Toxics Rules.

(2) The design of all storm water collection, conveyance, treatment and infiltration must be in accordance with the Washington Department of Ecology Stormwater Management Manual for Western Washington (August 2001).

c. Compliance with some of the above requirements may require the operator to take samples to confirm compliance.

3.10 Inspections

a. Inspections must be conducted in accordance with one of the two schedules listed below. The operator must specify in the SWPPP which schedule they will follow.

(1) At least once every seven calendar days

(2) At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

b. Inspection frequency may be reduced to at least once every month if:

(1) The entire site is temporarily stabilized,

(2) Runoff is unlikely due to summer conditions (e.g., 15 June to 15 September)

c. Inspections must be conducted by qualified personnel (provided by the operator or cooperatively by the operator and sub-operators). "Qualified personnel" means a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activity.

d. Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the storm water conveyance system. Sedimentation and erosion control measures identified in the SWPPP must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

e. Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may limit the access of inspection personnel to the areas described in paragraph 3.10d above. Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected on the same frequencies as other construction projects, but representative inspections may be performed. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described above. The conditions of the controls along each inspected 0.25 mile segment may be considered as representative of the condition of controls along that reach extending from the end of the 0.25 mile segment to either the end of the next 0.25 mile inspected segment, or to the end of the project, whichever occurs first.

f. For each inspection required above, you must complete an inspection report. As a minimum, the inspection report must include:

- (1) The inspection date
- (2) Names, titles, and qualifications of personnel making the inspection
- (3) Weather information for the period since the last inspection (or since commencement of construction activity if the first inspection) including a best estimate of the beginning of each storm event, duration of each storm event, approximate amount of rainfall for each storm event (in inches), and whether any discharges occurred
- (4) Weather information and a description of any discharges occurring at the time of the inspection
- (5) Location(s) of discharges of sediment or other pollutants from the site
- (6) Location(s) of BMPs that need to be maintained
- (7) Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location
- (8) Location(s) where additional BMPs are needed that did not exist at the time of inspection
- (9) Corrective action required including any changes to the SWPPP necessary and implementation dates

g. A record of each inspection and of any corrective actions taken must be retained as part of the SWPPP for at least three years from the date that permit coverage expires or is terminated. The inspection reports must identify any incidents of non-compliance with the permit

conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the construction project or site is in compliance with the SWPPP and this permit. The report must be signed in accordance with paragraph 3.12e.

3.11 Maintaining an Updated Plan

a. The SWPPP, including the site map, must be amended whenever there is a change in design, construction, operation, or maintenance at the construction site that has or could have a significant effect on the discharge of pollutants to the waters of the United States that has not been previously addressed in the SWPPP.

b. The SWPPP must be amended if during inspections or investigations by site staff, or by local, state, tribal or federal officials, it is determined that the discharges the SWPPP is ineffective in eliminating or significantly minimizing pollutants in storm water discharges from the construction site.

c. Based on the results of an inspection, the SWPPP must be modified as necessary to include additional or modified BMPs designed to correct problems identified. Revisions to the SWPPP must be completed within seven calendar days following the inspection. Implementation of these additional or modified BMPs must be accomplished as described in paragraph 3.6.

3.12 Signature, Plan Review and Making Plans Available

a. The SWPPP (including a copy of the EPA CGP and the Fort Lewis NOI and SWP3) must be retained at the construction site (or other location easily accessible during normal business hours to EPA, representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service and members of the FLEWS) from the date of commencement of construction activities to the date of final stabilization. The operator must have a copy of the SWPPP available at a central location on-site for the use of all those identified as having responsibilities under the SWPPP whenever they are on the construction site. If an on-site location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance at the construction site.

b. A sign or other notice must be posted conspicuously near the main entrance of the construction site. If displaying near the main entrance is infeasible, the notice can be posted in at the Fort Lewis Library. The sign or other notice must contain the following information:

(1) A copy of the Fort Lewis Notice of Intent acknowledged by EPA Region 10.

(2) The name and telephone number of the contact person for scheduling SWPPP viewing times. For linear projects, the sign or other notice must be posted at a publicly accessible location near the active part of the construction project (e.g., where a pipeline project crosses a road).

c. SWPPPs must be made available upon request by EPA, representatives of the U.S. Fish and Wildlife Service or the National Marine Fisheries Service and members of the FLEWS.

d. The copy of the SWPPP that is required to be kept on-site or locally available must be made available, in its entirety, to the EPA staff for review and copying at the time of an on-site inspection.

e. All SWPPPs must be signed and certified in accordance with the requirements below:

(1) For a corporation: By a responsible corporate officer as defined below:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation

(c) The manager of one or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: By a general partner or the proprietor, respectively

3.13 Management Practices

a. All control measures must be properly selected, installed, and maintained in accordance with any relevant manufacturer specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the operator must replace or modify the control for site situations as soon as practicable.

b. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts.

c. Litter, construction debris, and construction chemicals that could be exposed to storm water must be prevented from becoming a pollutant source in storm water discharges.

d. Except as provided below, stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased.

(1). Where stabilization by the 14th day is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(2) Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days, temporary stabilization measures do not have to be initiated on that portion of the site.

(3) In arid, semiarid, and drought-stricken areas where initiating perennial vegetative stabilization measures are not possible within 14 days after construction activity has temporarily or permanently ceased, final vegetative stabilization measures must be initiated as soon as practicable.

e. A combination of sediment and erosion control measures are required to achieve maximum pollutant removal.

(1) Sediment Basins: For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from the drainage area from a 2-year, 24-hour storm, or equivalent control measures, must be provided where attainable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, must be provided where attainable until final stabilization of the site. When computing the number of acres draining into a common location, it is not necessary to include flows from offsite areas and flows from on-site areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on-site, etc. In any event, the operator must consider public safety, especially as it relates to children, as a design factor for the sediment basin, and alternative sediment controls must be used where site limitations would preclude a safe design.

(2) For drainage locations which serve 10 or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions).

(3) For drainage locations serving less than 10 acres, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm or 3,600 cubic feet of storage per acre drained is provided.

f. Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., no significant changes in the hydrological regime of the receiving water).

3.14 Documentation of Permit Eligibility Related to Total Maximum Daily Loads (TMDLs).

a. Currently there are no EPA established TMDLs for bodies of water on or adjacent to Fort Lewis.

b. If a TMDL is established for a body of water:

(1) The FLEWS will assist the operator in obtaining the necessary documentation to include in the SWPPP.

(2) The SWPPP must include measures to ensure that the discharge of pollutants from the site is consistent with the assumptions and requirements of the EPA-established or approved TMDL, including any specific wasteload allocation that has been established that would apply to the discharge.

4.0 Special Conditions, Management Practices and Other Non-Numeric Limitations

4.1 Continuation of the Expired General Permit

If the Fort Lewis CGP is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. Operators operating under an approved SWPPP will automatically remain covered by the continued permit until the earliest of:

- a. Reissuance or replacement of this permit, at which time you must comply with the conditions of the new permit to maintain authorization to discharge
- b. Your submittal of a Notice of Termination
- c. Issuance of an individual permit for the project's discharges
- d. A formal permit decision by EPA to not reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit

4.2 Requiring an Individual Permit or an Alternative General Permit

At any time EPA may require Fort Lewis to obtain an individual NPDES permit or an alternative NPDES general permit. Fort Lewis will advise operators if this occurs and any actions required by the change in permits

4.3 Spills and Releases in Excess of Reportable Quantities.

a. The discharge of hazardous substances or oil in storm water discharges from the construction site must be prevented or minimized in accordance with the SWPPP. Such releases are not authorized by the GCP.

b. The GCP does not relieve the operator of the federal reporting requirements relating to spills or other releases of oils or hazardous substances. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either occurs during a 24-hour period:

c. The operator must report the spill by calling Fort Lewis 911 as soon as site staff have knowledge of the discharge

d. The operator must modify the SWPPP as required under paragraph 3.11 within seven calendar days of knowledge of the release to: provide a description of the release, the circumstances leading to the release, and the date of the release. Plans must identify measures to prevent the reoccurrence of such releases and to respond to such releases.

4.4 Attainment of Water Quality Standards After Authorization

a. You must select, install, implement and maintain BMPs at your construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained in paragraph 4.5b below, your SWPPP developed, implemented, and updated is considered as stringent as necessary to ensure that your discharges do not cause or contribute to an excursion above any applicable water quality standard.

b. At any time after authorization, EPA may determine that your storm water discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, EPA will require you to:

(1) Develop a supplemental BMP action plan describing SWPPP modifications in accordance with paragraph 3.11 to address adequately the identified water quality concerns

(2) Submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards

(3) Cease discharges of pollutants from construction activity and submit an individual permit application.

c. All written responses required under this part must include a signed certification consistent with paragraph 3.12e.

4-5. Retention of Records.

a. Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.

b. One copy of the SWPPP will be provided to the FLEWS when the plan is submitted for approval. A copy of all other records (e.g. completed maintenance inspection forms, training records, etc.) will be provided to the FLEWS when a termination request is submitted.

4-6. Standard Permit Conditions. Federal regulations require that the standard conditions are applicable to all NPDES permits. These conditions are also applicable to the SWPPP under which construction activity is conducted. The standard conditions can be found in Appendix G of the CGP.

Annex A – CGP NOI and Acknowledgement



U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER NOTICE OF INTENT CENTER



09-25-03

OPERATOR:

**FORT LEWIS DEVELOPMENT PLAN
AFZH-PWE, MS 17, PO BOX 339500
FORT LEWIS WA 98433-9500**

FACILITY:

**FT LEWIS MILITARY INSTALLATION
BUILDING 2012, ROOM 323
FORT LEWIS WA 98433-9500**

This letter acknowledges that you have submitted a complete Notice of Intent form to be covered under the NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Construction General Permit) issued by EPA on July 1, 2003 (FRL 7520 – 7). Please note that this letter is not the permit. The permit provides for authorization to discharge based on submission of a valid and complete Notice of Intent. If you do meet the eligibility requirements, coverage begins 7 days after the postmark date of your Notice of Intent. Your Notice of Intent was postmarked 9/9/2003

As stated above, this letter acknowledges receipt of a complete Notice of Intent. However, it is not an EPA determination of the validity of the information you provided. Your eligibility for coverage under the Permit is based on the validity of the certification you provided. Your signature on the Notice of Intent certifies that you have read, understood, and are implementing all of the applicable requirements. An important aspect of this certification requires that you correctly determine whether you are eligible for coverage under this permit.

As you know, the Construction General Permit requires you to have developed and begun implementing a Storm Water Pollution Prevention Plan (SWPPP) and outlines important inspection and recordkeeping requirements. You must also comply with any additional location-specific requirements applicable to your state or tribal area. A copy of the Construction General Permit must be kept with your SWPPP. An electronic copy of the Permit and additional guidance materials can be viewed and downloaded at www.epa.gov/npdes/stormwater.

For tracking purposes, the following number has been assigned to your Notice of Intent Form: **WA0001706**

If you have general questions regarding the storm water program or your responsibilities under the Construction General Permit, please call

Region: 10 Misha Vakoc (206) 553-6650

If you have questions about your Notice of Intent form, please call the EPA NOI Processing Center at 1-866-352-7755 (toll free) or send an inquiry via the online form at <http://www.epa.gov/npdes/noicontact>.

EPA NOI Processing Center
Operated by CTGi
1200 Pennsylvania Ave., NW
Mail Code: 4203M
Washington, DC 20460
1-866-352-7755

IV. SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI? Yes No

Location of SWPPP for viewing: Address in Section II Address in Section III Other

If Other:

SWPPP Street: _____

City: _____

State: _____ Zip Code: _____ - _____

SWPPP Contact Information (if different than that in Section II):

Name: _____

Phone: _____ - _____ - _____ Fax (optional): _____ - _____ - _____

E-mail (optional): _____

V. Discharge Information

Identify the name(s) of waterbodies to which you discharge. Puget Sound, American Lake, Murray Creek, Sequelitchew Creek & Lake, Lynn Lake, Kennedy Marsh

Is this discharge consistent with the assumptions and requirements of applicable EPA approved or established TMDL(s)?

Yes No

VI. Endangered Species Information

Under which criterion of the permit have you satisfied your ESA eligibility obligations?

A B C D E F

• If you select criterion F, provide permit tracking number of operator under which you are certifying eligibility:

VII. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: Paul T. Steucke Jr.

Print Title: Chief, Environmental & Natural Resources Division

Signature: 

Date: 4 Sept 03

EPA Form 3510-9 (Rev. 6/03)

15 Mar 04

Nastasia, Priscilla - Contractor

From: Vakoc.Misha@epamail.epa.gov
Sent: Wednesday, September 17, 2003 6:12 PM
To: nastasiap@lewis.army.mil
Subject: Common Plan of Development under the NPDES General Permit for Discharges from Construction Activity

Priscilla,

I apologize for my delay in getting this message to you.

As we discussed on the phone, I believe it is reasonable for Fort Lewis to consider its entire base as a "larger common plan of development or sale" in the context of the NPDES General Permit for Discharges from Construction Activity (CGP) issued by EPA on July 1, 2003. While Fort Lewis (and other similar facilities) are not required to plan on such a scale, I believe it is reasonable and possible for the Army as "the owner" to better manage the various construction projects on its facility in such a comprehensive fashion as we discussed during our conversation. Given that Fort Lewis does have a master plan with discrete timelines for various projects to occur, and a few of those construction projects may occur concurrently at different times at different locations within the facility boundaries, the idea that the Fort Lewis base is one large "common plan of development" makes sense.

The CGP Fact Sheet supports this notion. On page 6 of the CGP fact sheet, EPA states that "In many cases, a common plan of development or sale consists of many small construction projects." Further, in answer to another question, EPA states that "If you have a long-range master plan of development where some portions of the master plan are a conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended time period, you may consider the "conceptual" phases of development to be separate "common plans" provided the periods of construction for the physically interconnected phases will not overlap. For example, a university or an airport may have a long-range development concept for their property, with future development based largely on future needs and available funding."

Also, on page 7 of the Fact Sheet, the following question and answer reinforces the notion that public entities are not required to do so, but in fact may consider their entire jurisdiction to be a "common plan":

"What if the "Common Plan of Development or Sale" Actually Consists of Non-Contiguous Separate Projects?

There are several situations where discrete projects, that could be considered part of a larger "common plan," can actually be treated as separate projects for the purposes of permitting:

A. A public entity (e.g., a municipality, state, tribe, or federal agency) need not consider all construction projects within their entire jurisdiction to be part of an overall "common plan." For example, construction of roads or buildings in different parts of a state, county, or city could be considered separate "common plans." Only the interconnected parts of a project would be considered to be a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.).."

15 Mar 04

I hope this information is useful to you. If you have any further questions, please call me at (206) 553-6650.

Misha Vakoc
Storm Water Program Coordinator
EPA Region 10

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Annex B – Termination Request Form

Construction Storm Water Pollution Prevention Plan Termination Request

1. Operator:

2. Project Name:

3. This termination request is submitted for the following reason (check only one):

Final stabilization has been achieved on all portions of the site specified in the Storm Water Pollution Prevention Plan.

Another operator has assumed control over all areas of the site that have not been finally stabilized.

Coverage under an alternative NPDES permit has been obtained.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name:

Print Title:

Signature:

Date:

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Annex C – Sample Construction Storm Water Pollution Prevention Plan (SWPPP)

This annex contains a sample SWPPP. For the convenience of the user this sample is also available in Microsoft Word.

Instructions on how to use this sample

Section 1. This section contains necessary “boiler plate” and should be used “as is” by adding the company name and project name where indicated by the bold italic font.

Section 2. This section can be used “as is” by adding the company name and project name where indicated by the bold italic font.

Section 3. The user must provide their own text and figures for this section.

Section 4. The user must provide their own text and tables for this section.

Section 5. The user must provide their own text and figure for this section.

Section 6. The user must provide their own text for this section.

Section 7. This section must be used “as is” by adding the company name and project name where indicated by the bold italic font. Portions that are not needed can be deleted.

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Sample Plan

Construction Storm Water Pollution Prevention Plan (SWPPP)

[Company Name]
[Date]

[Project Name]



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1.0 Introduction

1.1 Background.

a. A Notice of Intent (NOI) for a Construction General Permit (CGP) was filed with the Environmental Protection Agency By Fort Lewis on 4 September 2003. The NOI was acknowledge by letter on 25 September 2003 and assigned the number WA0001706. Fort Lewis considers the NOI to have been valid and complete and is therefore authorized to discharge storm water from construction sites under the CGP. The CGP permit covers discharges from large and small construction activities that result in a total land disturbance equal to or greater than one acre, where those discharges enter surface waters of the United States or a storm sewer system leading to surface waters of the United States.

b. The goal of the CGP is to reduce or eliminate storm water pollution from construction activity by requiring the preparation and implementation of plans to control pollution and protect water quality.

c. The Storm Water Pollution Prevention Plan (SWP3) prepared by Fort Lewis under the CGP requires construction operators to supplement this plan with a site specific Storm Water Pollution Prevention Plan (SWPPP). This plan is the *[company name]* SWPPP for the *[project name]*. This plan provides the framework for reducing soil erosion and minimizing pollutants in storm water during construction.

(1) Defines the characteristics of the site and the type of construction that will be occurring

(2) Describes the site plan for the project to be constructed

(3) Describes the practices that will be implemented to control erosion and the release of pollutants in storm water

(4) Creates an implementation schedule to ensure that the practices described in this SWPPP are in fact implemented and to evaluate the plan's effectiveness in reducing erosion, sediment, and pollutant levels in storm water discharges from the site

(5) Describes the final stabilization/termination design to minimize erosion and prevent storm water impacts after construction is complete.

1.2 SWPPP Content. This SWPPP includes the following:

a. Identification of the SWPPP coordinator with a description of this person's duties.

b. Identification of the storm water pollution prevention team that will assist in implementation of the SWPPP during construction.

c. Description of the existing site conditions, including existing land use of the site (i.e., wooded areas, open grassed areas, pavement, buildings, etc.), soil types at the site, as well as the location of surface waters which are located on or next to the site (wetlands, streams, rivers, lakes, ponds, etc.)

d. Identification of the body of water(s) that will receive runoff from the construction site, including the ultimate body of water that receives the storm water.

e. Identification of drainage areas and potential storm water contaminants

f. Description of storm water management controls and various best management practices (BMPs) necessary to reduce erosion, sediment and pollutants in storm water discharge.

g. Description of the project monitoring plan and how controls will be coordinated with construction activities

h. Description of the implementation schedule and provisions for amendment of the plan.

2.0 SWPPP Coordinator and Duties

2.1 U. S. Army Contacts.

a. The U. S. Army project engineer for the project is:

[John Doe 253-966-1234]

b. The U. S. Army Storm Water Inspector is:

Shannon Peterson 253-966-1774

2.2 SWPPP Coordinator.

a. The construction site SWPPP coordinator for the project is:

[Mr. Jack Smith (Company Name) 206-833-1234]

b. The construction site SWPPP coordinator's duties include:

(1) Implement the SWPPP plan with the aid of the SWPPP Team

(2) Oversee maintenance practices identified as BMPs in the SWPPP

(3) Implement and oversee employee training

(4) Conduct or provide for inspection and monitoring activities

(5) Identify other potential pollutant sources and make sure they are included in the plan

(6) Identify and deficiencies in the SWPPP and make sure they are corrected.

(7) Ensure that any changes in construction plans are addressed in the SWPPP

2.3 SWPPP Team. To aid in the implementation of the SWPPP, a SWPPP Team is established with the following members:

[Tom Johnson (Company Name) - responsible for the implementation of housekeeping and monitoring procedures]

[Mike Carter (Company Name) - responsible for the integrity of structural BMPs]

3.0 Project Description

3.1 Site Location. The construction site is located at 1200 Towne Ter Road, Fort Lewis, Washington. Figure 3-1 is an area map show the location of the site. The site is a 32.1 acre parcel located in the vicinity of [coordinates]. The site is bound to the north by a wooded area, to the west by Old Mill Stream, to the south by Towne Ter Road and to the east by a residential area.

3.2 Construction Type.

a. Capital Construction is building an office building for Fort Lewis. The facility will consist of a single building, a road and a parking area. Two storm system inlets will be placed in the front parking area and two storm system inlets will be placed in the rear of the building to collect and convey storm water to a proposed sedimentation basin. Roof drains on the building will convey storm water to the storm system inlets for eventual discharge to the proposed sedimentation basin.

b. Capital Construction and their sub contractors will be on site from approximately 7 AM until 5 PM, five days per week.

c. Clearing, grading, construction of the building and parking areas, and site landscaping are expected to be completed within 10 months following groundbreaking.

3.3 Existing Site Conditions.

a. The 32.1 acre property is currently a mix of heavy wooded areas and grassy, open swales. The property slopes from east to west toward the Old Mill Stream, an intermittent dry stream bed. Top soils range from a silty-sand and the east side of the property to a heavy loam on the west nearest the intermittent dry stream bed.

b. Surface waters which do not infiltrate the soils, migrate to Old Mill Stream which ultimately discharges in a storm water discharge canal. The canal, in turn, empties into Puget Sound in the vicinity of Solo Point, approximately two miles downstream.

3.4 Site Plan

a. Figure 3-2 is a site map showing project site boundaries, the proposed location of the building, paved parking and drive areas, storm system inlets, the proposed limits of clearing and grading, and the various drainage areas. A total of 15.8 acres will be cleared and grubbed during construction activities. Approximately 2.3 acres of the heavily wooded area along the eastern portion of the property will be clear-cut and the timber removed. The concrete block building and the loading dock area on the north side of the building will be 177,500 square feet and the 30,000 square feet respectively. Four storm system inlets will collect storm water from roof drains, parking areas, and the loading dock area and convey it to a one-acre storm water sedimentation basin. Overflow from the sedimentation basin will discharge into Old Mill Stream and the discharge will be controlled to prevent flooding of the receiving stream.

b. Since the building will be slab-on-grade construction, rough grading and excavation for concrete footings will be the primary soil disturbing activities. All soils excavated for footings will be stockpiled on site prior to finish grading to allow drainage away from the building foundation. All soils excavated from storm system trenches will be stockpiled and then finish graded during construction of the paved drive, parking, and loading dock areas. All exposed soils will be reseeded and new vegetation will be planted as soon as possible.

c. Figure 3-2 also shows the locations of the drainage areas and the apparent storm water drainage patterns.

(1) Drainage area DA-01 located along the western one-third of the site currently drains toward Old Mill Stream. After clearing and grubbing, the majority of storm water will drain to the proposed sedimentation basin.

(2) Drainage area DA-02 included the loading dock area plus the roof drains from buildings. Storm water from DA-02 will collect in one of the two storm system inlets before discharging to the sedimentation basin.

(3) Drainage area DA-03 includes the proposed parking area south of the building. Storm water from DA-03 will empty into of two storm systems that discharge to the sedimentation basin.

(4) Drainage area DA-04 begins along the eastern edge of the parking area and continues east through the area where tree removal will occur. A vegetated swale will be developed in this area following construction and soil stabilization. The vegetated swale will improve storm water infiltration.

(5) Drainage area DA-05 located along the northern and eastern one-third of the site is generally covered by vegetation. Because of the high permeability of the soils and the absence of site activities (clearing and grading) in this area, this drainage area is not significant and will not be addressed further in the SWPPP.

d. A description of each drainage area is provided in Table 3-1.

Table 3-1. Characteristics of Storm Water Drainage

Drainage Area⁽¹⁾	Storm Water Flow Description During Construction Activities	Total Size (sq ft)	Impervious Surface Area During Construction (sq ft)	Runoff Coefficient⁽²⁾	Drainage Discharge Point
DA-01	Western Portion: Overland flow across the cleared and graded area to the sedimentation basin	240,000	0	Low	Old Mill Steam
DA-02	Loading Dock Area: Overland flow across the area to the two new storm inlets SS-03 and SS-04. Roof drains from the building during construction will also discharge to the compacted gravel before entering either SS-03 or SS-04. This area will be paved following construction	82,500	52,500	High	Old Mill Stream
DA-03	Parking Area and Construction Entrance: Overland flow across the compacted gravel area to storm inlets SS-01 and SS-02. This area will be paved following construction	177,500	0	Medium	Old Mill Stream
DA-04	Eastern Portion: Cleared and graded areas where timber will be removed. Flow from this area will be toward the proposed vegetated swale for infiltration	100,200	0	Low	Vegetated Swale
DA-05	All vegetation covered areas outside the clearing and grading limits	798,000	0	Low	None

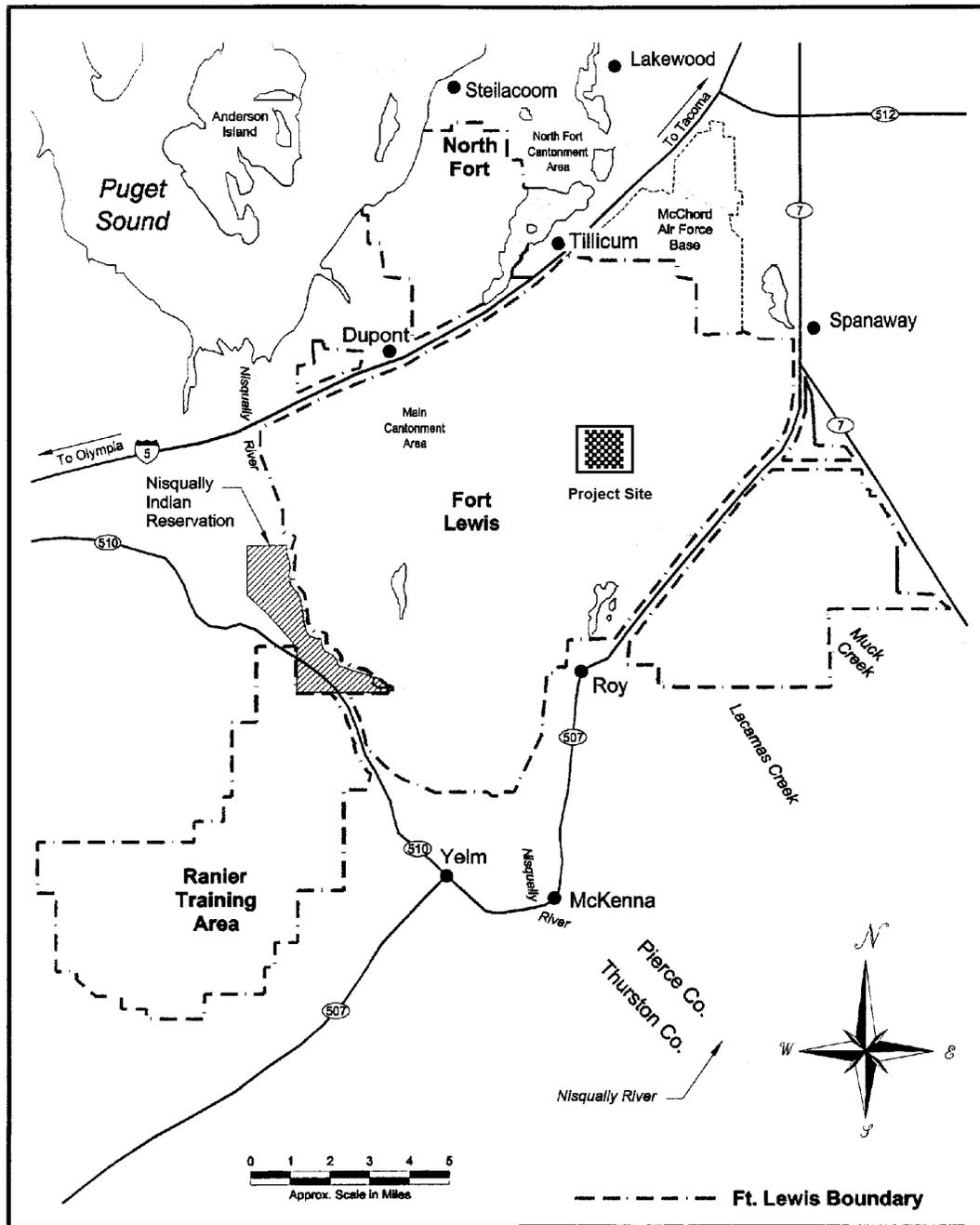


Figure 3-1. Site Location

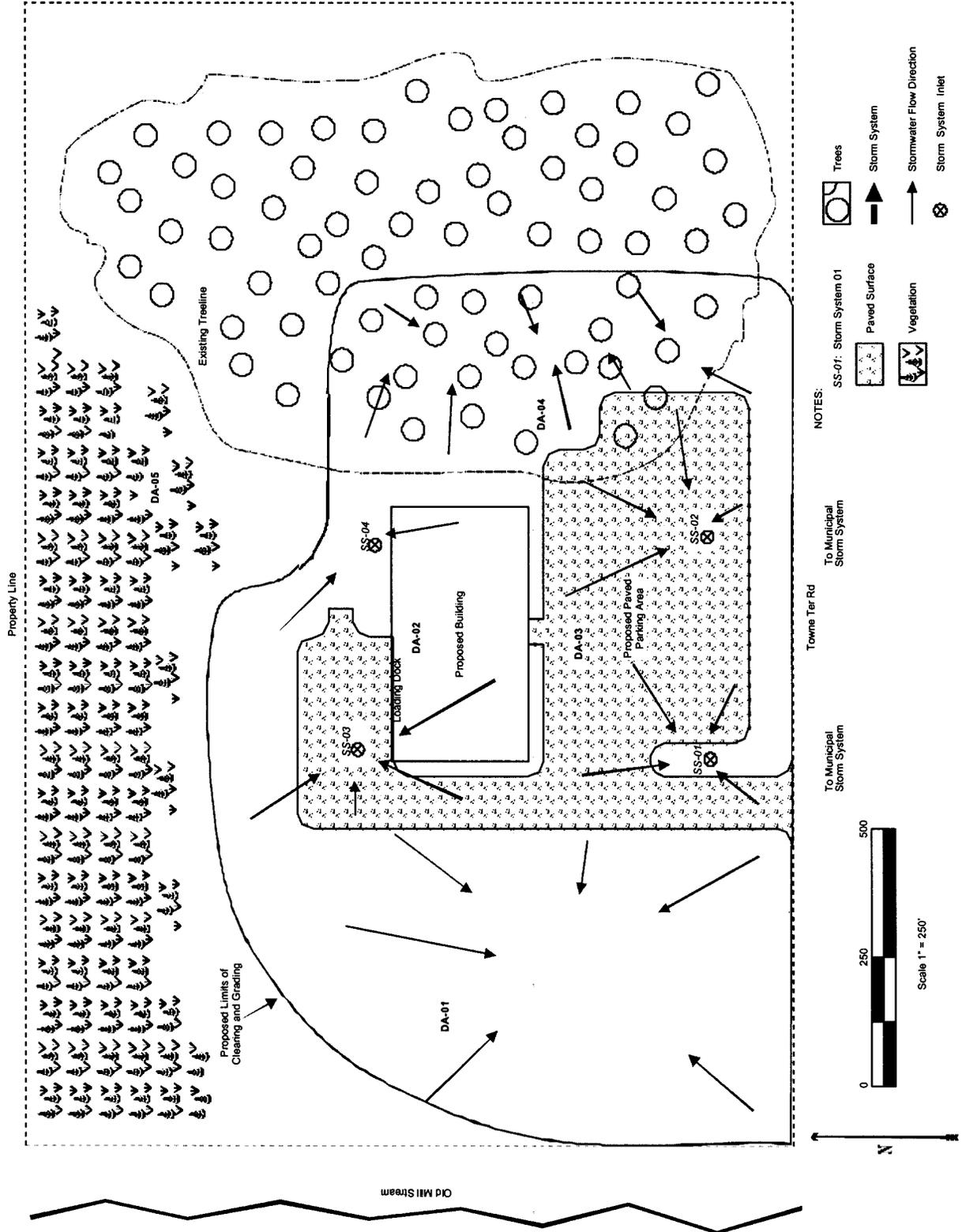


Figure 3.2. Site Map with Drainage Areas and Storm Water Flow (Prior to BMP Implementation)

4.0 Identification of Potential Storm Water Contamination

4.1 Significant Material Inventory. Pollutants that result from clearing, grading, excavation, and building materials and have the potential to be present in storm water runoff are listed in Table 4-1. This table includes information regarding material type, chemical and physical description, and the specific regulated storm water pollutants associated with each material.

4.2 Potential Areas for Storm Water Contamination. The following potential source areas of storm water contamination were identified and evaluated:

- a. Cleared and graded areas
- b. Asphalt loading dock construction and building construction
- c. Construction site entrance and asphalt parking area construction
- d. Tree removal area
- e All undisturbed areas

4.3 Site Specific Pollution Potential. Table 4-2 presents site specific information regarding storm water pollution potential from each of the above areas.

4.4 Summary of Available Storm Water Sampling Data. No storm water sampling data is available for this site. *[The Fort Lewis Environmental Water Section (FLEWS) will advise you if there is data available]*

Table 4-1. Potential Construction Site Storm Water Pollutants

Trade Name Material	Chemical/Physical Description⁽¹⁾	Storm Water Pollutants⁽¹⁾
Pesticides (insecticides fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets or grains	Chlorinated hydrocarbons, organophosphates, carbonates, arsenic
Fertilizer	Liquid or solid grains	Nitrogen, phosphorous
Plaster	White granules or powder	Calcium sulfate, calcium carbonate, sulfuric acid
Cleaning solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates
Asphalt	Black solid	Oil, petroleum distillates
Concrete	White solid	Limestone, sand
Glue, adhesives	White or yellow liquid	Polymers, epoxies
Paints	Various colored liquid	Metal oxides, Stoddard solvent, talc, calcium, carbonate, arsenic
Curing compounds	Creamy white liquid	Naphtha
Wastewater from construction equipment washing	Water	Soil, oil and grease solids
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium
Hydraulic oil and fluids	Brown oily petroleum hydrocarbon	Mineral oil
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
Diesel fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil and grease, naphthalene, xylenes
Kerosene	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates
Anti-freeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead and zinc)
Erosion	Solid particles	Soil and sediment

Table 4-2. Locations of Potential Sources of Storm Water Contamination

Drainage Area⁽¹⁾	Potential Storm Water Contamination Point	Potential Pollutants	Potential Problem
DA-01	Cleared and graded areas	Soil erosion, fertilizer, pesticides	Erosion of soils from cleared and graded areas have the potential to discharge into Old Mill Stream
DA-02	Asphalt loading dock construction and building construction	Plaster, cleaning solvents, asphalt, concrete, paints, hydraulic oil, gasoline, antifreeze, soil erosion, fertilizer, pesticides, glue adhesives, curing compounds, wood preservatives, kerosene	Accidental spills of paints and cleaning solvents, leaking hydraulic oil and antifreeze from construction equipment, gasoline and diesel fuel spills while fueling construction equipment, erosion of exposed and stockpiled soils and degradation of scrap dry wall can potentially contaminate storm water. Asphalt chemicals can be released to storm water if a rain event occurs before curing is complete.
DA-03	Construction site entrance and asphalt park area construction	Asphalt, hydraulic oil, gasoline, antifreeze, soil erosion, fertilizer and pesticides	Leaking hydraulic oil and antifreeze from clearing, grading and asphalt application construction equipment. Gasoline and diesel fuel spills while fueling construction equipment and erosion of exposed and stockpiled soils. Asphalt chemicals can be released to storm water if a rain event occurs before curing is complete. Tracking of soil into the road through the construction site entrance.
DA-04	Tree removal area	Soil erosion, fertilizer and pesticides	Ruts caused by logging equipment can fill with water, preventing complete re-vegetation.
DA-05	All undisturbed areas	None	No storm water related issues with this completely vegetated area.

5.0 Storm Water Management Controls

5.1 Purpose

a. This section identifies the types of temporary and permanent erosion and sediment controls that will be used during construction activities.

b. The controls will provide soil stabilization for disturbed areas and structural controls to divert runoff and remove sediment. This section will also address control of other potential storm water pollutant sources such as construction materials (paints, concrete dust, solvents, plaster), waste disposal, control of vehicle traffic, and sanitary waste disposal.

5.2 Temporary and Permanent Erosion Control Practices

a. A list of best management practices (BMPs) has been developed and the locations of these BMPs are shown in Figure 5-1. A number of the BMPs included in this plan have been developed to serve as post-construction storm water controls.

[You must follow the storm water management practices contained in the Western Washington Storm Water Manual (August 2001), including the proper selection, implementation and maintenance of appropriate BMPs]

c. Site Wide Control Measures. To prevent soil from washing into Old Mill Stream or the undisturbed areas of the site, the following BMPs will be implemented.

(1) Silt fencing and straw bale barriers will be placed along the perimeter of the area to be cleared and graded before any clearing or grading takes place. Supersilt fencing will be used to steep slopes at appropriate locations.

(2) A sedimentation basin will be constructed near the southwest corner of the construction site before any construction begins. The sedimentation basin, with an approximate depth of ten feet and surface area of one acre, will be constructed to a volume of 435,600 cubic feet and is expected to remove 80 percent of suspended solids from the site's storm water runoff. The sedimentation basin was designed by a professional engineer to keep peak flow rates in Old Mill Stream from the 2 and 10 year/24 hours storm events at their pre-site development rates. The sedimentation basin will remain as a permanent storm water detention structure following construction activities. When up slope areas are stabilized, the accumulated sediment will be removed from the sedimentation basin and a geotextile will be placed along the sides for slope stabilization.

(3) Influent points to the sedimentation basin will be stabilized with crushed stone to avoid washout. The distance between the influent location and the effluent location in the sedimentation basin will be maximized (e.g. the length to width ratio of the basin will be a minimum of 2:1). The basin will drain through a 12-inch diameter corrugated metal riser and outlet pipe to a rip rap outlet apron leading to Old Mill Stream. Influent to the sedimentation basin will be supplied from two storm water pipes and natural site drainage. The influent pipes

will be placed at a depth of approximately three feet above the bottom of the basin to facilitate sediment removal.

(4) All cleared and graded soils will be sloped to the sedimentation basin.

(5) Within fourteen days after clearing and grading, 4,000 pounds of ground agricultural limestone and 2,000 pounds of 10-10-10 fertilizer will be applied to each acre to be stabilized.

(6) After fertilizing, all areas which will not be impacted by construction of the building will be seeded. The permanent seed mix shall consist of 80 lbs/acre tall fescue and 40 lbs/acre kobe lespedeza.

(7) After seeding, each area will be mulched with 4,000 pounds per acre of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight.

(8) Top soil stock piles will be stabilized with temporary seed and mulch no later than 14 days from the last construction activities in that area. Temporary seed shall be rye (grain) applied at the rate of 120 pounds per acre.

(9) Areas of the site which are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until asphalt is applied.

(10) Once construction at the site is nearly complete, a vegetated swale will be constructed in DA-04 where the majority of trees were removed. Soils along the east side of the parking area and the building will be sloped toward the swale, creating a natural depression to retain storm water and promote reinfiltration. The vegetated swale will remain as a permanent storm water control measure.

5.3 Construction Practices to Minimize Storm Water Contamination

a. All waste materials will be collected and stored in a securely lidded metal dumpster. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of twice per week and the trash will be hauled to the Trinity Landfill. No construction materials will be buried on site. All personnel will be instructed regarding the correct procedure for waste disposal. All sanitary waste will be collected from the portable units a minimum of three times per week by U-Dump, a licensed sanitary waste management contractor.

b. Good housekeeping and spill control practices will be followed during construction to minimize storm water contamination from petroleum products, fertilizers, paints and concrete. Good housekeeping practices for each drainage area are listed below.

(1) DA-01:

(a) Fertilizers will be applied only in the minimum amounts recommended by the manufacturer

(b) Fertilizers will be worked into the soil to limit exposure to storm water

(c) Fertilizers will be stored in a covered shed and partially used bags will be transferred to a sealable bin to avoid spills.

(2) DA-02:

(a) All vehicles on site will be monitored for leaks and receive regular preventive maintenance to reduce the change of leakage

(b) Petroleum products will be stored in tightly sealed containers which are clearly labeled

(c) Spill kits will be located at all fueling sources and maintenance activities

(d) Any asphalt substances used on site will be applied according to the manufacturer's recommendations

(e) Sanitary waste will be collected from portable units a minimum of two times a week to avoid overfilling

(f) A covered dumpster will be used for all waste materials

(g) All paint containers and curing compounds will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm system, but will be properly disposed according to the manufacturer's instructions

(h) Materials and equipment necessary for spill cleanup will be kept in the temporary material storage onsite. Equipment will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, saw dust and plastic and metal trash containers.

(i) Spray guns will be cleaned on a removable tarp

(j) All spills will be cleaned up immediately upon discovery. All spills will be reported immediately to 911

(k) Concrete trucks will not be allowed to wash out or discharge surplus concrete on drum wash water on the site or Fort Lewis.

(l) Two storm systems will be installed to collect and deliver storm water to the sedimentation basin.

(m) Form release oil used for decorative stone work will be applied over a pallet covered with an absorbent material to collect excess fluid. The absorbent material will be replaced and disposed of properly when saturated.

(n) When testing/cleaning water supply lines, the discharge from the tested pipe will be collected and conveyed to a completed storm water pipe system for ultimate discharge into the sedimentation basin.

(3) DA-03:

(a) A stabilized construction entrance will be constructed to reduce vehicle tracking of sediments

(b) The paved street adjacent to the site entrance will be swept daily to remove excess mud, dirt or rock tracked from the site.

(c) Dump trucks hauling material from the construction site will be covered with a tarpaulin. Two storm systems will be installed to collect and deliver storm water to the sedimentation basin.

(4) DA-04. All ruts caused by equipment used for cutting and removing of trees will be graded.

5.4 Coordination of BMPs with Construction Activities

a. Structural BMPs will be in place before construction begins, except as noted in paragraph 5.4.b.

b. The following BMPs will be coordinated with construction activities

(1) The temporary perimeter controls (silt fences and straw fails) will be installed before any clearing and grading begins

(2) Clearing and grading will not occur in an area until it is necessary for construction to proceed.

(3) The stabilized construction site entrance and sedimentation basin will be constructed before clearing and grading begins

(4) Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch

(5) After the entire site is stabilized, the accumulated sediment will be removed from the basin and the permanent geotextile membrane will be placed along the sides.

(6) The vegetated swale will not be constructed until the entire site is stabilized

(7) The temporary perimeter controls (silt fence and straw bails) will not be removed until all construction activities at the site are complete and soils have been stabilized.

5.5. Sampling Requirements.

[If there are sampling requirements [provided by the FLEWS] detail them here]

5.6 Endangered and Threatened Species and Critical Habitat Protection

[If there is a restriction due to endangered and threatened species and critical habitat (provided by the FLEWS) include this paragraph and appropriate text]

5.7 Total Maximum Daily Load (TMDL)

[If there is an applicable TMDL (provided by the FLEWS) include this paragraph and appropriate text]

5.8 Certification of Compliance with Federal, State and Local Regulations

a. This SWPPP reflects Fort Lewis requirements for storm water management and erosion and sediment control, as established in the Fort Lewis Construction Storm Water Pollution Prevention Plan (SWP3) and as required by the CGP.

b. To ensure compliance, this plan was prepared in accordance with the Washington Department of Ecology Western Washington Storm Water Manual (August 1002). There are no other applicable State or Federal requirements for sediment and erosion site plans (or permits), or storm water management site plans (or permits).

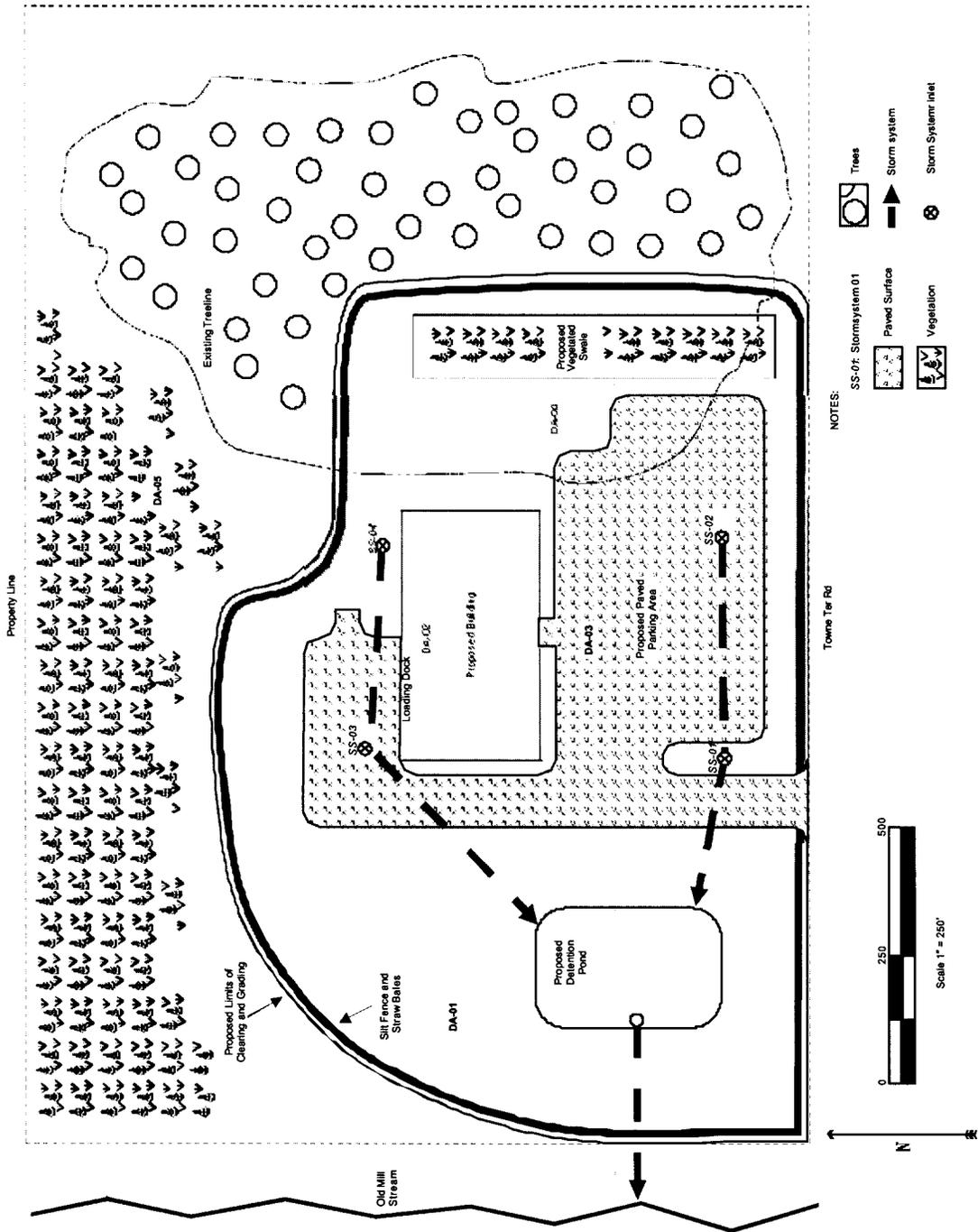


Figure 5-1. Site Map with Structural BMPs

6.0 Maintenance Inspection Procedures

6.1 Inspections

a. Visual inspections of all cleared and graded areas of the construction site will be performed daily and within 12 hours of the end of a storm with rainfall amounts greater than 0.5 inches.

b. The inspection will be conducted by the SWPPP Coordinator for his designated storm water team members.

c. The inspection will verify that the structural BMPs described in Section 5 of this SWPPP are in good condition and are minimizing erosion. The inspection will also verify that the procedures used to prevent storm water contamination from construction materials and petroleum products are effective.

d. The following inspection and maintenance practices will be used to maintain erosion and sediment controls:

(1) Built up sediment will be removed from silt fencing when it has reached on third the height of the fence.

(2) Silt fences will be inspected for depth of sediment, for tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.

(3) The sediment basin will be inspected for depth of sediment and built up sediment will be removed when it reaches one foot in depth.

(4) Temporary and permanent seeding will be inspected for bare spots, washouts, and healthy growth

(5) The stabilized construction entrance will be inspected for sediment tracked on the road, for clean gravel, and to make sure that the culvert beneath the entrance is working and that all traffic uses the stabilized entrance when leaving the site.

6.2 Maintenance Inspection Report

a. The maintenance inspection report will be completed after each inspection.

b. A copy of the inspection report to be completed by the SWPPP Coordinator is provided at Annex A of this SWPPP

c. Completed forms will be maintained on-site during the entire construction project.

d. Following construction, the completed forms will be retained at the prime contractors office, Capital Construction, Inc. for a minimum of one year.

e. If construction activities or design modifications are made to the site plan that could impact storm water, this SWPPP will be amended appropriately. The amended SWPPP will have a description of the new activities that contribute to the increase pollutant loading and the planned source control activities.

6.3 Employee Training

a. An employee training program will be developed and implemented to educate employees about the requirements of the SWPPP. This education program will include background on the components and goals of the SWPPP and hands-on training in erosion controls, spill prevention and response, good housekeeping, proper material handling, disposal and control of waste, equipment fueling, and proper storage, washing, and inspection procedures.

b. All employees will be trained prior to their first day on the site

c. Training will be documented by recording the name and date of each individual receiving the training (Table 6-1).

Table 6-1
Record of Storm Water Training

Name	Company	Date
John Smith	Ajax Construction	12 Jan 04
Alice Uptom	Ajax Construction	13 Jan 04
Bill Williams	ABC Concrete	13 Jan 04
Phil Jones	Ajax Construction	13 Jan 04

7.0 Certification

[Prime contractor (operator) and all sub contractors are required to certify the SWPPP prior to submitting it for approval at the FLEWS]

Prime Contractor Certification – *[Name of Company]*

[Date]

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that the BMPs contained in this SWPPP were properly selected from those contained in the Western Washington Storm Water Manual and will be properly implemented and maintained in accordance with the guidance in the manual.

Signature
Name
Title

Sub Contractor Certification *[name of company and type of work performed]*

[Date]

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature
Name
Title

Annex A - Inspection Logs

On the following pages are sample inspection logs. These are only samples. Your inspection logs can be of your own design.

There must be an inspection log for each BMP. The log must indicate:

- a. The date of the inspection
- b. Noted conditions
- c. If any discrepancies are noted indicate:
 - (1) Who is supposed to make the correction
 - (2) The date by which the corrections will be completed.

[Operator's Name]

[Name of Project]

Storm Water Pollution Prevention Plan

Inspection and Maintenance Report Form

To be completed *[every seven days or at least once every 14 days and with 24 hours of the end of a rainfall event greater than 0.5 inches].*

Inspector: _____

Date: _____

Inspector's Qualifications:

Days since last rainfall: _____

Amount of last rainfall: _____ inches

Soil Stabilization Measures

Drainage Area	Date of Last Disturbance	Stabilized (Yes/No)	Stabilized With	Condition
DA-01				
DA-02				
DA-03				
DA-04				
DA-05				

Stabilization required: *Fill out if required*

To be performed by: _____

On or before: _____

[Prepare Inspection and Maintenance Report Forms for each structural BMP listed in Section 5]

[Operator's Name]

[Project Name]

Storm Water Pollution Prevention Plan

Inspection and Maintenance Report Form

Perimeter Structural Controls

Silt Fence and Straw Bails

Date	Drainage Area Perimeter	Has Silt Reached 1/3 of Fence Height?	Is Fence Properly Secured?	Is There Evidence of Washout or Overtopping?
	DA-01			
	DA-02			
	DA-03			
	DA-04			

Maintenance required for silt fence and straw bails:

To be performed by: _____ On or before: _____

[Operator's Name]

[Project Name]

**Storm Water Pollution Prevention Plan
Inspection and Maintenance Report Form**

Sediment Basin

Date	Depth of Sediment Basin	Condition of Basin Side Slopes	Any Evidence of Overtopping of the Embankment	Condition of Outfall from Sediment Basin

Maintenance required for stabilized construction entrance:

To be performed by: _____ On or before: _____

[Operator's Name]

[Project Name]

Storm Water Pollution Prevention Plan

Inspection and Maintenance Report Form

Stabilized Construction Entrance

Date	Does much sediment get tracked on to road?	Is the gravel clean or is it filled with sediment?	Does all traffic use the stabilized entrance to leave the site?	Is the culvert beneath the entrance working?

Maintenance required for stabilized construction entrance:

To be performed by: _____ On or before: _____