R.W. RHINE, INC.

PORT OF SEATTLE

LORA LAKE APARTMENT BUILDINGS

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

REVISED 8/14/09

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1.0 INTRODUCTION

This storm water pollution prevention plan (SWPPP) has been prepared to document the procedures implemented by R.W. Rhine to prevent dust control water and storm water from entering the storm system and leaving the Lora Lake Apartments project site. All catch basins will be plugged and used as a sump and no water will leave the catch basins and enter the storm drain piping system. All storm water entering the catch basins will be pumped into the onsite swimming pool and/or baker tank onsite. See Storage Requirements/calculations in Figure 3.

1.1 SITE DESCRIPTION

R.W. Rhine is a demolition contractor. The project is located at the Lora Lake Apartment Complex at 15001 Des Moines Memorial Drive in Burien, Washington. Activities anticipated at the site include: (1) demolition of all structures identified in the Plans and Specifications leaving all concrete slabs, footings, and foundations, (2) removal of light tubes, smoke detectors, and ballasts.

Figure 1 shows a general vicinity map of the site with designated work zones and catch basins within those zones. Figure 2 shows the storm water storage requirements and Figure 3 is the general inspection log.

1.1.1 SEQUENCE OF MINOR SOIL DISTURBING ACTIVITIES:

- Other than the small excavation areas for utility cut/caps at each building location, per plan sheet C12.01, no soil disturbance is to occur on this project, all silt fencing, catch basin protection etc. is to be placed per the plans, specifications and Interim Action Work Plan developed by AECOM prior to any demolition taking place
- All concrete and asphalt will remain in place and gravel pads will be built for the excavator to work from

1.1.2 RECEIVING WATER:

Storm water runoff from the site will be collected in the catch basins that are plugged and used only as a sump and no water will leave the catch basins and enter the storm drain piping system. All storm water entering the catch basins will be pumped into the onsite swimming pool and/or baker tank onsite. Outlets will be protected with CB socks. The storm water collected will be tested and once approved discharged into the sewer system per the Sewer Discharge permit obtained by Ceccanti, Inc.

1.2 POLLUTION PREVENTION TEAM

A stormwater pollution prevention team has been created to ensure that the proper procedures described in this SWPPP are followed. The personnel on the team and their responsibilities are listed in Appendix B. The applicable personnel to contact related to stormwater pollution prevention and with best knowledge of this plan are listed in the following section. Emergency contacts are also provided in the event of a spill or release of materials, excessive storm events, and uncontrolled erosion that has the potential to negatively impact the receiving water.

1.2.1 CONTACT INFORMATION

Main R.W. Rhine Contact:	**Alternate R.W. Rhine Contact:**
Todd Goodner, Superintendent Office: (253) 537-5852 Cellular: (253) 606-4821 Gilbert Olson Jr., Superintendent Office (253) 537-5852 Cellular: (253) 606-4806	Deanna Peters, Project Manager/Safety Office: (253) 537-5852 Cellular (253) 606-4804

Emergency Contacts (Spill Reporting):

For oil spills:	National Response Center: 1-800-424-8802 Washington State: 1-800-258-5990 or 1-800-OILS-911
For all other materials:	Ecology's Southwest Regional Office: 1-360-407-6300

2.0 BEST MANAGEMENT PRACTICES (BMPS)

This section documents the practices and procedures necessary to prevent pollution from storm water runoff from the site. Best management practices (BMPs) are documented in this section of the plan. The BMPs include both source controls and treatment controls which described below. These measures are intended to compliment the measures currently listed in the plans, specifications, and Interim Action Work Plan developed by the Port of Seattle and AECOM:

2.1 BMP CONTROLS

The following activities will be performed as needed to address erosion prevention, sediment control, and control of other pollutants at the site:

- **Construction Access** - Access to the construction site will be limited to authorized personnel. Permanent fencing is in place to restrict access to the construction site.

- **Catch Basin Protection** - Protective sediment traps will be placed in all catch basins receiving storm water from the work zones and other catch basins will be sealed. The sediment traps will be monitored and changed as necessary. All concrete slabs, footings, foundations and asphalt paving will remain in place and undisturbed.

- **Silt Fence** – Silt fence will be installed per the plans and specifications and inspected daily.

- **Stabilization Practices** – The only disturbed area anticipated is the cut/cap of the water/sewer system. These disturbed areas are not anticipated to be left in a condition that would result in erosion that would reach the storm system.

- **Stockpiles** – No soils are anticipated to be left in an area that would adversely affect storm water runoff. The soil from the cut/cap of the water/sewer will be stockpiled on Visqueen, the cut/cap performed and the soil will immediately be placed back in the excavation.

- **Spill Response Equipment** – Because of the potential for spills of fuels, hydraulic oils, diesel fuel and lubrication oils at the job site, an adequate supply of spill response equipment will be maintained onsite. Spill response equipment includes oil absorbent materials (pads, floating booms, granular absorbent), gloves and plastic bags.

3.0 INSPECTION AND MAINTENANCE PRACTICES

The following are the inspection and maintenance practices that will be used to maintain erosion and sediment controls:

1. All control measures will be inspected each work day and following any rain event. An inspection log will be completed as provided in Figure 3.
2. All measures will be maintained in good working order; if repair is necessary it will be initiated immediately.
3. Catch basin inserts will be cleaned and replaced as needed.
4. Built-up sediment will be removed from the silt fence, if any, when it has reached one third the height of the fence (this is not anticipated on this project due to no ground disturbance taking place)
5. Silt fence will be inspected for depth of sediment, damaged sections, and secure attachment to fence posts placed firmly in the ground.
6. Catch basins will be inspected at the completion of the project.

4.0 SPILL PREVENTION

The following are the material management and product specific practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff.

4.1 GOOD HOUSEKEEPING:

The following good housekeeping practices will be followed onsite during the project:

- An effort will be made to store only sufficient amounts of products to do the job.
- All materials stored onsite will be stored in a neat, orderly manner.
- The site superintendent will inspect daily to ensure proper use and disposal of materials.

4.2 HAZARDOUS PRODUCTS:

The following practices will be used to reduce the risks associated with hazardous materials:

- Products will be kept in their original containers unless they are not re-sealable.
- Original labels and material safety data will be retained for important product information.
- Surplus products that must be disposed of will be discarded according to the manufacturer's or agency recommended methods of disposal.
- Products will be stored away from storm water collection system.

4.3 PRODUCT SPECIFIC PRACTICES:

The following product practices will be followed onsite:

- Petroleum Products – All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce leakage. Leaks will be corrected as soon as a problem is recognized. Petroleum products will be stored in tightly sealed containers which are clearly labeled.

5.0 SPILL CONTROL:

In addition to good housekeeping and material management practices discussed in the previous sections, the following practices will be followed for spill prevention and cleanup:

- All spills will be cleaned up immediately after discovery.

- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the Port and appropriate state or local government agency, regardless of the size.
- The site superintendent responsible for day-to-day site operations will be the spill prevention and cleanup coordinator.

6.0 TRAINING AND RECORDKEEPING

Employee training will be conducted during regular onsite safety meetings and will be documented in the safety meeting reports. Training will consist of informing employees of their specific responsibilities to prevent stormwater pollution (including good housekeeping), the locations of spill response equipment, and the appropriate individuals to contact in the event of a spill or release of pollutants.

7.0 DOCUMENT 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 information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Name and Title: Deanna Peters, Project Manager/Safety/CESCL

Signature: _____

Date Signed: _____

Figure 1

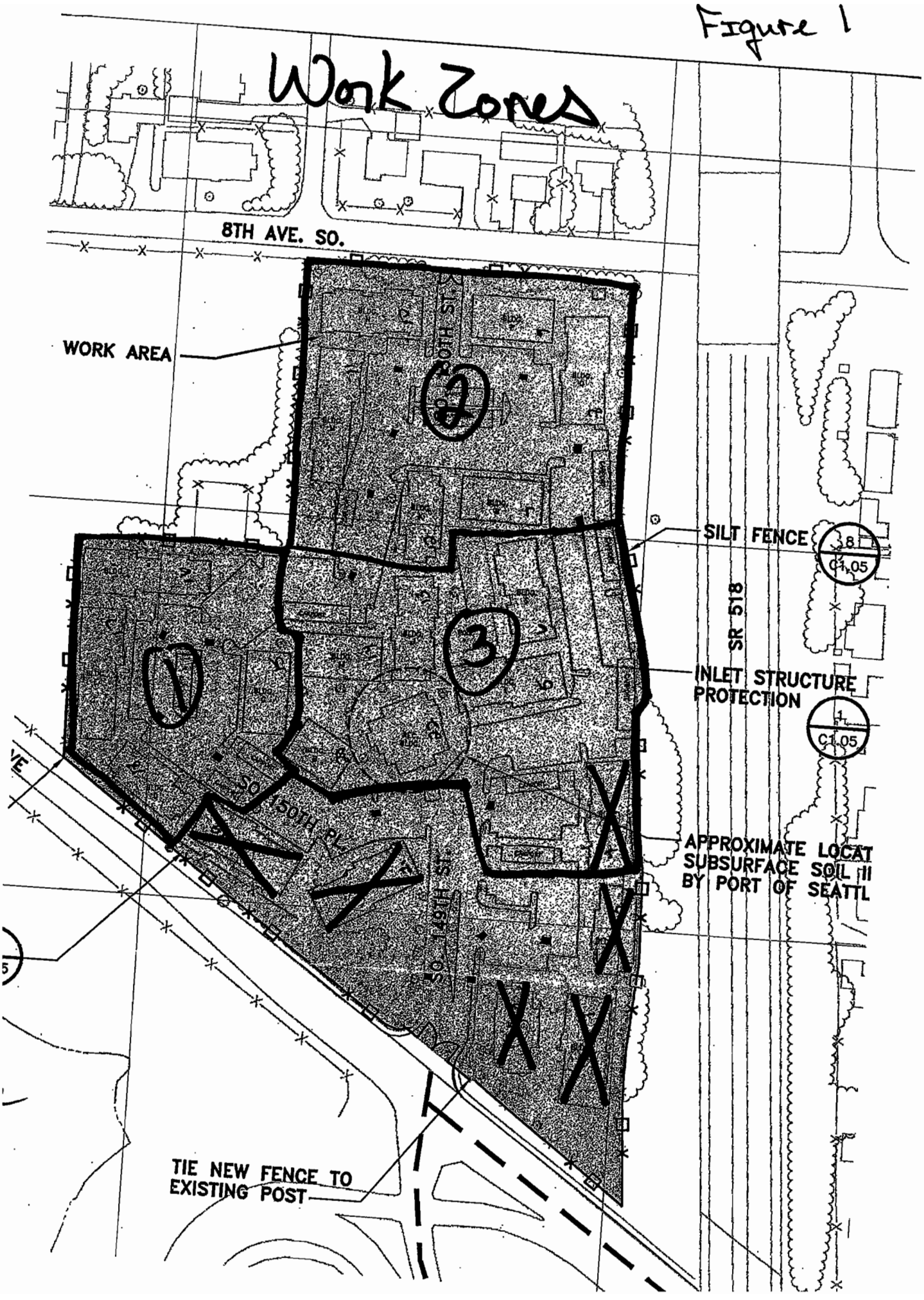
Work Zones
8TH AVE. SO.
WORK AREA
SILT FENCE
8
C1.05
SR 518
INLET STRUCTURE PROTECTION
1
C1.05
APPROXIMATE LOCAT
SUBSURFACE SOIL II
BY PORT OF SEATTL
TIE NEW FENCE TO EXISTING POST

FIGURE 2

WORK ZONE STORMWATER STORAGE REQUIREMENTS

Work Zone #1 (see Figure 1 for work zone map)

Total Area = 1.40 acres

Impervious Area = 1.08 acres

Pervious Area = 0.32 acres

Minimum Storage Volume Required = 11,109 gallons

Recommended Number of 20K Gallon Baker Tanks = 1

Work Zone #2 (see Figure 1 for work zone map)

Total Area = 2.08 acres

Impervious Area = 1.69 acres

Pervious Area = 0.39 acres

Minimum Storage Volume Required = 17,289 gallons

Recommended Number of 20K Gallon Baker Tanks = 1

Work Zone #3 (see Figure 1 for work zone map)

Total Area = 2.27 acres

Impervious Area = 1.85 acres

Pervious Area = 0.42 acres

Minimum Storage Volume Required = 18,906 gallons

Recommended Number of 20K Gallon Baker Tanks = 1

Figure 3

Stormwater/Erosion Control Inspection Form											
DATE:					TIME:			CONTACT:			
SITE:								ACRES:			
LOCATION:											
WEATHER:											
PERMIT ON SITE	YES	NO			PERMIT NO.						
SWPPP ON SITE	YES	NO			CONTRACTOR:						
Best Management Practices in the SWPPP:											
Control BMPs	In Plan		Properly installed		Treatment BMPs	In Plan		Properly Installed		Other:	
Preserv Nat Veg	Y	N	Y	N	Intercept Dike/Swale	Y	N	Y	N		
Buffer Zones	Y	N	Y	N	Grass Lines Swales	Y	N	Y	N		
High Vis Fence	Y	N	Y	N	Channel Lining	Y	N	Y	N		
Stake & Wire Fence	Y	N	Y	N	Water bars	Y	N	Y	N		
Stabilized Entrance	Y	N	Y	N	Pipe Slope Drains	Y	N	Y	N		
Wheel Wash	Y	N	Y	N	Subsurface Drains	Y	N	Y	N		
Road/Pk Area Stable	Y	N	Y	N	Level Spreader	Y	N	Y	N		
Temp/Perm Seeding	Y	N	Y	N	Check Dams	Y	N	Y	N		
Mulching	Y	N	Y	N	Triangular Silt Dike	Y	N	Y	N		
Nets/Blankets	Y	N	Y	N	Outlet Protection	Y	N	Y	N		
Plastic Covering	Y	N	Y	N	Sto Drain Inlet Protec	Y	N	Y	N		
Sodding	Y	N	Y	N	Straw Bale Barrier	Y	N	Y	N		
Topsoiling	Y	N	Y	N	Brush Barrier	Y	N	Y	N		
Polyacrylamides	Y	N	Y	N	Gravel Filter Berm	Y	N	Y	N		
Surface roughing	Y	N	Y	N	Silt Fence	Y	N	Y	N		
Gradient Terraces	Y	N	Y	N	Vegetated Strip	Y	N	Y	N		
Dust Control	Y	N	Y	N	Straw Wattles	Y	N	Y	N		
Materials On Hand	Y	N	Y	N	Sediment trap	Y	N	Y	N		
Concrete Handling	Y	N	Y	N	Temp Sed Pond	Y	N	Y	N		
Sawcut & Surface	Y	N	Y	N	SW Chem Treatment	Y	N	Y	N		
Erosion Control Lead	Y	N	Y	N	SW Filtration	Y	N	Y	N		
Pay Erosion Work	Y	N	Y	N	Is the site stabilized?	Yes		Partially		No	
Scheduling	Y	N	Y	N	Turbid Water is being discharged?					Yes	No
Small Project	Y	N	Y	N	Receiving Water:						
Water Quality Samples Taken?			Y	N	Results:	pH		TUR	CON	TEM	Other:
Sample ID:					LOC:						
Sample ID:					LOC:						
Sample ID:					LOC:						
This site is IN/OUT of compliance with the terms of the SWPPP & Permit.											
Summary of remedial action(if needed):											
I certify under penalty of law that this report is true, accurate and complete, to the best of my knowledge and belief.											
Name:					Title:						
Signature:											

POLLUTION PREVENTION PLAN

PROJECT NAME:

2009 Airfield Improvements - Contract 1

WORK PROJECT 1020005

July, 2009

PREPARED BY:

Ceccanti, Inc.
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Tacoma, WA 98446
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1.0 INTRODUCTION

Presented herein is Ceccanti, Inc.'s Pollution Prevention Plan (PPP) in conjunction with all work being performed at Ponds C,D,F,G, the Lora Lake Apartments, Des Moines Nursery Mitigation, and AOA Fencing Replacement. The purpose of this PPP is to identify the methods that convey how to properly handle, store, and dispose of hazardous materials brought on site by Ceccanti, Inc. for the Work. Handling includes spill prevention, containment and countermeasures, in accordance with best management practices (BMPs). This PPP applies to all areas associated with the contracted work including, but not limited to work areas, equipment and material storage areas, and staging areas. This PPP plan will be revised and modified, as needed, during the course of the work activities. This PPP will supplement the Ceccanti, Inc. Site-Specific Health and Safety Plan and subcontractor activities on site.

This PPP was prepared in accordance with the Port of Seattle's specifications in Division 1 General Requirements (Section 01631 Pollution Prevention Planning and Execution) (Port of Seattle, 2007). The provisions of this PPP plan will apply to Ceccanti, Inc., subcontractors, suppliers, and all others who may access the work site by way of Ceccanti's activities.

1.1 Site Description

The work includes the Demolition of 16 one, two and three story apartment buildings and related structures on a site north of SeaTac International Airport, including related work such as soil protection and utility disconnection; perform environmental mitigation including clearing and grubbing, debris removal, grading, soil preparation, in-stream work, planting and fencing within environmentally sensitive upland areas and wetlands; new and modifications of existing storm drainage systems and stormwater detention ponds, including clearing, grading, site access improvements, outlet control modifications and wildlife deterrent netting; install new AOA fencing including clearing, installation of wildlife deterrent fencing and demolition of existing fencing.

Additionally, at the Lora Lake site, all asphalt and concrete slabs, footings, and foundations will remain on site and will not be removed as part of R.W. Rhine's contract with the Port.

The property may be developed by the Port of Seattle at a later date with specifics unknown to both Ceccanti, Inc. and R.W. Rhine.

2.0 DEFINITIONS

Absorbent: Any material capable of absorbing oils, water-based materials, solvents, acids, and other hazardous materials. Absorbent materials include: pads, kitty litter, floor dry, and other commercially available materials.

Best Management Practice (BMP): The variety of managerial, operational, and structural measures that will be implemented to prevent and reduce the amount of contaminants in stormwater and environment. (Example: Providing secondary containment for liquid storage is a BMP).

Container: Any portable device, in which a material is stored, transported, treated, disposed of, or otherwise handled.

Daily report: The report that the Contractor shall submit daily to include Contractor daily activities.

Dangerous Waste: Solid wastes designated by the State of Washington Under Chapter 173-303 WAC and regulated as Dangerous Waste, Extremely Hazardous Waste, and/or Mixed Waste. (The State of Washington is authorized to implement Federal Hazardous Waste Regulations – see also Hazardous Waste Definition).

Hazardous Material: A substance or material, including a hazardous substance, hazardous waste, marine pollutant, including but not limited to: diesel, gasoline, petroleum products, solvents, paints, acids, lubricants, curing compounds, form release agents, adhesives, sealants, and epoxies.

Hazardous Material Storage Area: The area used by the Contractor to store hazardous material.

Hazardous Material Container Labeling System: The system used by the Contractor for identifying the secondary containers used to store hazardous materials or wastes. Acceptable methods include: Department of Transportation (DOT), Hazardous Material Information System (HMIS); National Fire Protection Association Fire Diamond (NFPA Hazard Rating).

Hazardous Waste: Those solid wastes designated by 40 CFR Part 261, and regulated as hazardous and/or mixed waste by the United States EPA.

Material Safety Data Sheet (MSDSs): Written or printed material available for each chemical that includes information on: the physical properties, hazards to personnel, fire and explosion potential, safe handling recommendations, health effects, fire fighting techniques, and reactivity and disposal.

Secondary Container: Any container, other than the original container that is used for transferring, holding, storing or otherwise containing hazardous materials or wastes.

Secondary Containment: A device designed, installed, or operated to prevent any migration of wastes or accumulated liquid to soil, ground water, or surface water. The device must, at minimum, hold 110 percent of the volume of the largest container being stored. The device must have the strength to contain a spill and be made of materials that will not be degraded by the wastes or accumulated liquids it is intended to contain.

Sorbent: A material used to soak up free liquids by either adsorption or absorption, or both.

Storm Drainage System (SDS): Consists of any drain, inlet, catch basin, slot drain, pipe, gully, fissure, ditch, or other form of conveyance that collects and transports stormwater.

3.0 POLLUTION PREVENTION MANAGEMENT PERSONNEL

Ponds C,D,F,G/Des Moines Nursery/AOA Fencing Installation

Mr. Leonard Spadoni of Ceccanti, Inc. is the Project Manager/Project Safety and Health Representative and will be designated as the Pollution Prevention Plan Inspector for the Ponds C,D,F,G, Des Moines Nursery Mitigation Work, and the AOA Fencing Installation. Mr. Al Ausbun will be the Site Safety Officer (SSO) for the duration of the project. Mr. Spadoni and Mr. Ausbun will be responsible for ensuring compliance with all requirements and will be available, on call (on 24 hour-basis) throughout the period of demolition activities.

- Contact Name: Leonard Spadoni
- Cell Phone Number: (253) 377-2733
- Additional Contact Name: Al Ausbun
- Cell Phone Number: (253) 377-2728
- Additional Contact Name: Al Ausbun Jr.
- Cell Phone Number: (253) 405-2147
- E-mail address: leonard@ceccantiinc.com
- Office mailing address: 4116 Brookdale Road E Tacoma, WA 98446
- Port Steve King (206) 786-1487

Lora Lake Apartments

Ms. Deanna Peters of R.W. Rhine is the Project Manager/Project Safety and Health Representative and will be designated as the Pollution Prevention Plan Inspector for the Lora Lake Apartment Demolition project. Mr. Gil Olson Jr. will be the Site Safety Officer (SSO) for the duration of the project. Ms. Peters and Mr. Gil Olson Jr. will be responsible for ensuring compliance with all requirements and will be available, on call (on 24 hour-basis) throughout the period of demolition activities.

- Contact Name: Deanna Peters
- Cell Phone Number: (253) 606-4804 Home Phone Number (253) 770-8135
- Additional Contact Name: Gil Olson Jr.
- Cell Phone Number: (253) 606-4806 Home Phone Number (253) 770-3801
- Additional Contact Name: Mike Lano
- Cell Phone Number: (253) 606-4818
- Office Phone Number: (253) 537-5852
- Office Fax Number: (253) 531-9548
- E-mail address:deanna@rwrhine.com
- Office mailing address: 1124 112th St East, Tacoma, Washington 98445

4.0 HAZARDOUS MATERIAL INVENTORY LIST

Hazardous materials to potentially be brought on site during the course of the project will include the following:

Hazardous Material Type	Container/Storage Volume
Diesel Fuel	Fuel trucks*
Motor Oil	55-gallon drum
Hydraulic Oil	55-gallon drum
Penetrating Oil	<5-gallon container
Unleaded Gasoline	4-5 gallon containers

- On-site fueling of equipment and vehicles will be performed. Up to three 100-gallon dieseil pickup truck mounted fuel tanks will be present at the work area.

Based on the specifications, the following hazardous materials may be present on site:

Hazardous Material	Location
Asbestos	None identified in survey performed around 7/20/2007
Lead Paint	Buildings on site (none identified)
Silica Dust	Concrete on site
CFC's	Air conditioners on-site
Suspect PCB ballasts	None identified in survey performed around 7/20/2007
Suspect Mercury-containing light tubes	Assumed and will be removed prior to demolition

Workers will be aware of the hazards associated with exposure to asbestos, lead, silica, PCBs, and mercury as part of the Ceccanti, Inc. Hazard Communication program. Please see the Ceccanti, Inc. Site-Specific Health and Safety Plan for more information. Dust control measures will be utilized during all demolition activities. Such measures have been outlined in the Contractor Erosion and Sediment Control Plan.

During demolition activities at the Lora Lake Apartments site, it is the intent of R.W. Rhine to meet the requirements of:

WAC 296-155-176, "Lead in Construction"
WAC 296-62-077, "Asbestos, Tremolite, Antophyllite, and Actinolite"
WAC 296-900, "Core Rules"
Puget Sound Clean Air Agency (PSCAA) Regulation III, Article 4, Section 4.02, "Asbestos Control Standards"
EPA Toxic Substance Control Act (TSCA) PCB Regulations, 40 CFR 761, State of Washington Dept. of Ecology's Dangerous Waste Regulation, WAC 173-303

5.0 MATERIAL SAFETY DATA SHEETS (MSDSs)

The MSDSs of each hazardous material to be brought on site by Ceccanti, Inc. (listed in Section 4.0) are presented in the appendices of the RW Rhine Lora Lake Apartment Site-Specific Health and Safety Plan. For all hazardous materials not listed in the original Hazardous Material Inventory List, Ceccanti, Inc. will provide the Port of Seattle any additional MSDS prior to bringing the material on site and the PPP will be revised and provided to the Port of Seattle within 7 days.

6.0 HAZARDOUS MATERIAL CONTAINERS LABELING SYSTEM

Ceccanti, Inc. will maintain proper, identifiable labels to all hazardous materials and secondary containers, except when the hazardous material is intended for immediate use by the employee transferring the material. The secondary container labeling program will include the following items:

1. Identification of container with a legible label containing the materials product name, as it appears on the material's original container label.

2. Include the name of the material's manufacturer, as it appears on the chemicals original container label.

3. Include appropriate hazard warnings, which identify the chemicals associated risks to health, flammability, or reactivity.

4. RW Rhine will mark each container with the project number. Original containers will also be marked with the project number.

5. The marking on the label will be permanent, easily identifiable and placed with care to prevent defacing of the marker through abrasion, chemical reaction, or other means that would hinder marker identification.

At all times during the Work, Ceccanti, Inc. shall assure that proper and identifiable labels are attached to all hazardous materials, secondary containers, except when the hazardous material is intended for immediate use by the employee transferring material.

7.0 HAZARDOUS MATERIAL CONTAINER STORAGE AND HANDLING

Hazardous materials will be stored and handled in the following manner:

- All hazardous materials regardless of the size of the container will be stored in secondary containment with a minimum capacity of 110% storage volume of the largest container.
- All hazardous material containers will be stored with the container lid secured, to prevent spills or leaking.
- All hazardous materials will be stored under waterproof covering.
- Demolition debris, including lead-containing materials, asbestos, non-friable asbestos roofing, and potentially PCB or mercury-containing lighting will be handled in accordance with the work plan and all applicable regulations.
- Upon completion of a specific task for which the hazardous materials were used, RW Rhine will document in the Daily Report (Form CM03), the amount of hazardous material removed from the site, and the product and manufacturer names of such materials.

8.0 HAZARDOUS MATERIAL SPILL PREVENTION

The following spill prevention measure will be implemented at the project site:

1) Hazardous Material Transfer

- With the exception ofthose products needed for vehicle fueling and maintenance, RW Rhine does not plan on bringing any hazardous materials on site. Therefore, hazardous material transfer shall occur as outlined below.

2) Vehicle and Equipment Fueling at the Fueling Area

- Fueling shall be restricted to a designated fueling area within the Contractor Staging /Stockpile Area designated in Figure 1.
- Incoming equipment and the fueling area will be routinely checked for leaks and spills.
- The equipment fueling operation will utilize pumps, funnels, and absorbent pads.
- Drain pans will be used under fluid transfer operations.
- A spill kit will be located within 100 feet ofthe fueling operation.
- The fuel truck will have an automatic shut off valve.
- Employees transferring fuels shall be instructed not to "top off'.
- Fueling will not take place within 100 feet of any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes.
- In certain instances, fueling at the designated area may not be reasonable or ascertainable. In these cases, in addition to the above, the following will be required:

    o Restrict or eliminate fueling near storm drains
    o Cover storm drains if fueling in the area is required
    o Perform fueling on concrete if at all possible

3) Vehicle and Equipment Maintenance

- Engine, transmission, and hydraulic oil may be added, as needed, utilizing funnels and drip pans.
- Absorbent pads will be placed to prevent fluid contact with soil.
- No fresh or used engine fluids will be stored at the project site. Engine fluids will be brought to the site on a fuel truck that will not remain on site, except during fueling or maintenance activities (i.e. oiling).

- Secondary containment, including plastic or metal buckets, shall be used for fuel cans, oils, or other hazardous materials such that if the material spilled, the container would be capable of containing its entire contents.

- No vehicle maintenance other than emergency repair will be performed at the project site.

4) Small Engine Fueling and Maintenance

- All small engine fueling operations will utilize funnels.

- Absorbent pads will be placed to prevent fluid contact with soil.

- Fueling will not take place within 100 feet of any natural or manmade drainage conveyance including ditches, catch basins, ponds, wetlands, and pipes.

- Contractor will not drain and replace engine fluids on Port property.

- These fluids may be added, as needed utilizing funnels.

- Secondary containment, including plastic or metal buckets, shall be used for fuel cans, oils, or other hazardous materials such that if the material spilled, the container would be capable of containing its entire contents.

- Fluid addition will be done over drip pans.

- Absorbent pads will be placed to prevent fluid contact with soil.

5) Equipment Storage

- Drip pans and absorbent pads will be placed under equipment susceptible to oil leakage that is unused for more than 4 hours, overnight, weekends, and holidays.

6) Spill Prevention *Kits*

- Spill prevention kits will be stored at designated locations on the project site and at the hazardous material storage areas (on the fuel truck).

- An approved equipment spill kits (Foss Attack Paks or equivalent) will be utilized.

- Spill kits should include the following and will be available on-site for the duration ofthe project:

Material	Quantity/Unit
55-gallon drum	1
Oil absorbent pads	12
Water-based absorbent pads	12
Visqueen	1 roll
Loose absorbent material (i.e. kitty litter)	5-gallon bucket
Heavy-duty garbage bags	24 bags
Shovel	1 shovel
Broom	1 broom
Spill response procedures sheet	1 form
Spill report form (attached)	10 copies

9.0 HAZARDOUS MATERIAL SPILL CONTROL AND RESPONSE

Ceccanti, Inc. will implement the following spill control and response measures in the event of a hazardous materials release:

a) Hazard Assessment - the source, extent, and quantity of the spill will be assessed.

b) Security and Personal Protection - If the spill cannot be safely and effectively controlled, then evacuate the area and immediately notify outside response services (go to Step e). If the spill can be safely and effectively controlled, secure the area and proceed immediately with spill control (impacts to waters of the state should be given the highest priority after human health and safety)

c) Containment and elimination of Source - Contain the spill with absorbent materials or a soil berm around the affected area. Eliminate the source of the spill by closing valves, sealing leaks, providing containment, or deactivating pumps. *NOTE:* Spill control measures may include damming the spill, covering floor drains, and/or preventing the fluid from entering the storm water systems. Contaminants include turbidity as well as chemicals.

d) Cleanup - When containment is complete, use absorbent, other materials, and/or appropriate equipment to clean up the spill for off site disposal

e) Notification - The SSO shall report all spills immediately to the Port PM/Engineer, and Phoinix - Greg Ferris (206) 799-0480. The Port of Seattle Dire Department will be contacted for large spills or where safety is a concern, they can be reached at (206) 433-5380. The following information must be reported:

- Time of spill
- Location and source of the spill and equipment involved
- Estimated amount of spill
- Measures taken to contain the spill and secure the area

Other applicable agencies that may also be notified include:

-Washington State Emergency Management Division (800) 258-5990 (24hours)
-Washington State Department of Ecology (oil spill hotline) (425) 649-7229
-U.S. Coast Guard National Response Center (800) 424-8802 or (206) 2207221

10.0 HAZARDOUS MATERIAL CLEANUP AND REMOVAL

The cleanup of hazardous materials and removal of all hazardous materials/wastes will include the following:

1. Cleanup will be defined as the Work site being free of all hazardous material(s), waste(s) container(s), containment device(s), scrap material(s), used spill pads or absorbent pads, or any other hazardous material debris resulting from the Contractor activities.

2. Hazardous material(s) and waste(s) will be disposed of in a fully permitted disposal facility with the approvals necessary to accept the waste materials that are disposed of. The Port will retain title to all hazardous waste presently on-site, encountered during demolition, removal, and excavation (no actual excavation activities will take place on the Lora Lake Demolition project).

3. Contaminated soils will be characterized, placed on a plastic liner or within 55-gallon steel drums, covered with lids and plastic and labeled. Known contaminated soils, if kept segregated need not be tested. Unknown contaminated soils must be characterized. (No contaminated soils are anticipated on this project)

4. Contaminated materials, such as absorbent materials, rags, containers, gloves, will be collected and placed into labeled containers.

5. Hazardous materials and wasted generated by the Contractor during construction are the responsibility of the Contractor and will be disposed of properly in accordance with all applicable regulations. This includes providing adequate containers (e.g., leak-proof and DOT approved) with proper labels and properly staging the waste containers using the BMPs such as providing secondary containment in a centralized area and preventing exposure to storm runoff or precipitation.

6. Any unanticipated hazardous materials, waste, or contaminated soils encountered during demolition that are not generated by the Contractor shall be immediately brought to the PM/Engineer's attention for determination of appropriate action. Contractor shall not disturb such hazardous materials or contaminated soils until directed by the Port's PM/Engineer.

11.0 BMP MAINTENANCE AND REMOVAL

All BMPs will be maintained and implemented for the life of the project or until removed by order of the Port PM/Engineer.

BMPs will be maintained during all suspensions of work and all non-work periods.

BMPs will be maintained and repaired as needed to assure continued performance of their intended function and in accordance with the approved Plan.

All BMPs will be removed on completion of project.

12.0 REFERENCES

The following rules, requirements and regulations specified may apply to this work:

Sea-Tac International Airport Rules and Regulations (Current Edition)

Sea-Tac Airport Stormwater Pollution Prevention Plan, as required by NPDES Permit No. WA-002465-1

Sea-Tac International Airport Spill Prevention Control and Countermeasures (SPCC) Plan: January 2003. Kennedy/Jenks Consultants

Port of Seattle Regulations for Airport Construction, (Current Edition)

Puget Sound Stormwater Management Plan, Puget Sound Water Quality Action Team; 1998

Surface Water Design Manual, King County Public Works, September 1998

Stormwater Management Manual for the Puget Sound Region, Department of Ecology; 2001 (or Current Version).

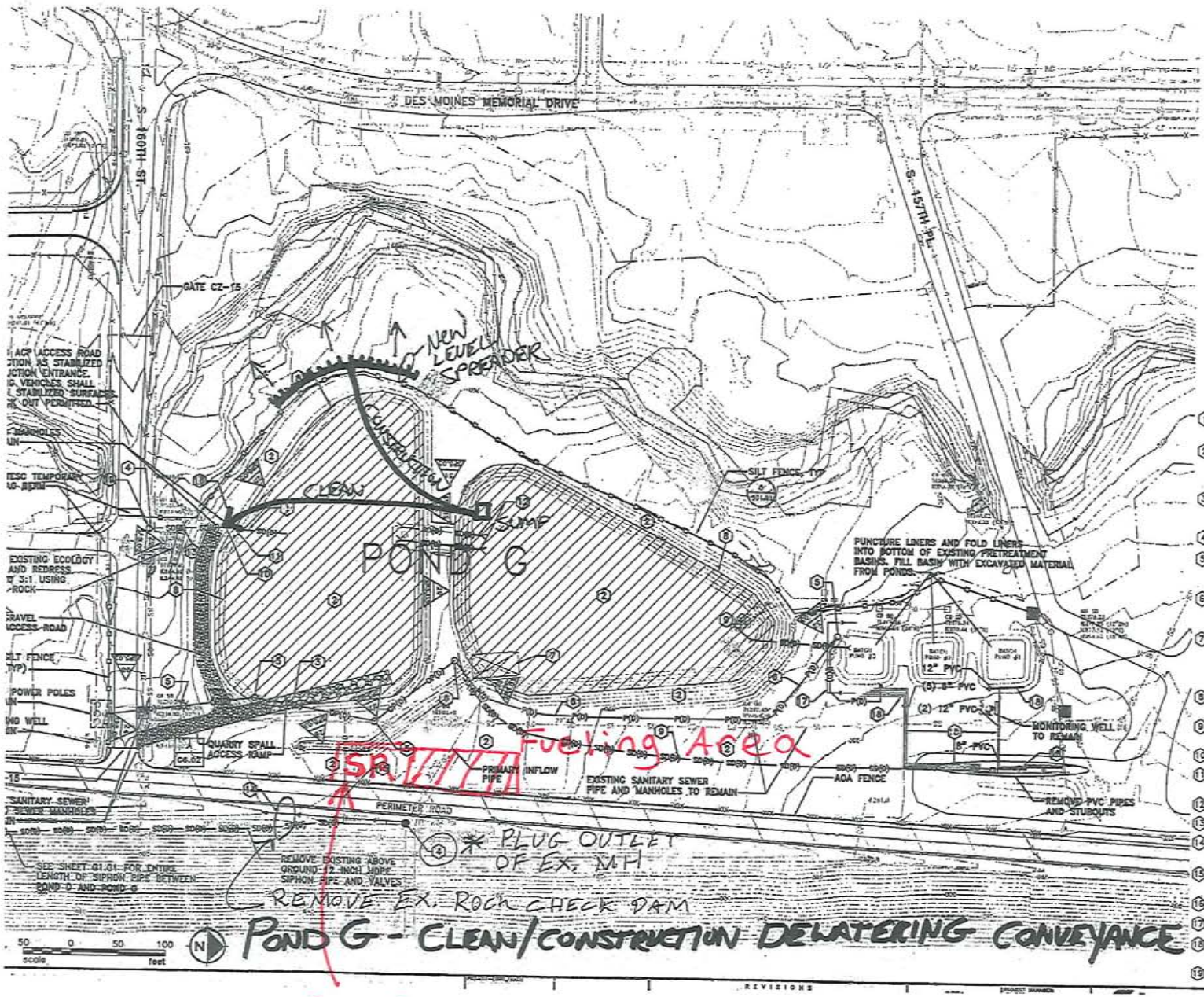
King County Stormwater Pollution Control Manual, 1998

Part C - Hazardous Communication: Chapter 296-62-054 WAC, "Right to Know".

Dangerous Waste Regulations: Chapter 173-303 WAC. February 1998 Edition.

FIGURE 1

MAP INCLUDING FUELING AND SPILL KIT LOCATIONS



NOTES:

1. SEE SHEET SD1.01 FOR TESC STANDARD DETAILS.
2. SEE SHEET GP1.02 FOR PROJECT HAUL ROUTES.
3. SEE SHEET G0.01 FOR ABBREVIATIONS AND GENERAL LEGEND.
4. SEE SHEETS SP5.02 AND SP5.03 FOR EXISTING CONDITIONS PHOTOS.
5. EXISTING ELECTRICAL CONDUITS TO BE DEMOLISHED MAY OR MAY NOT CONTAIN COPPER CONDUCTOR.

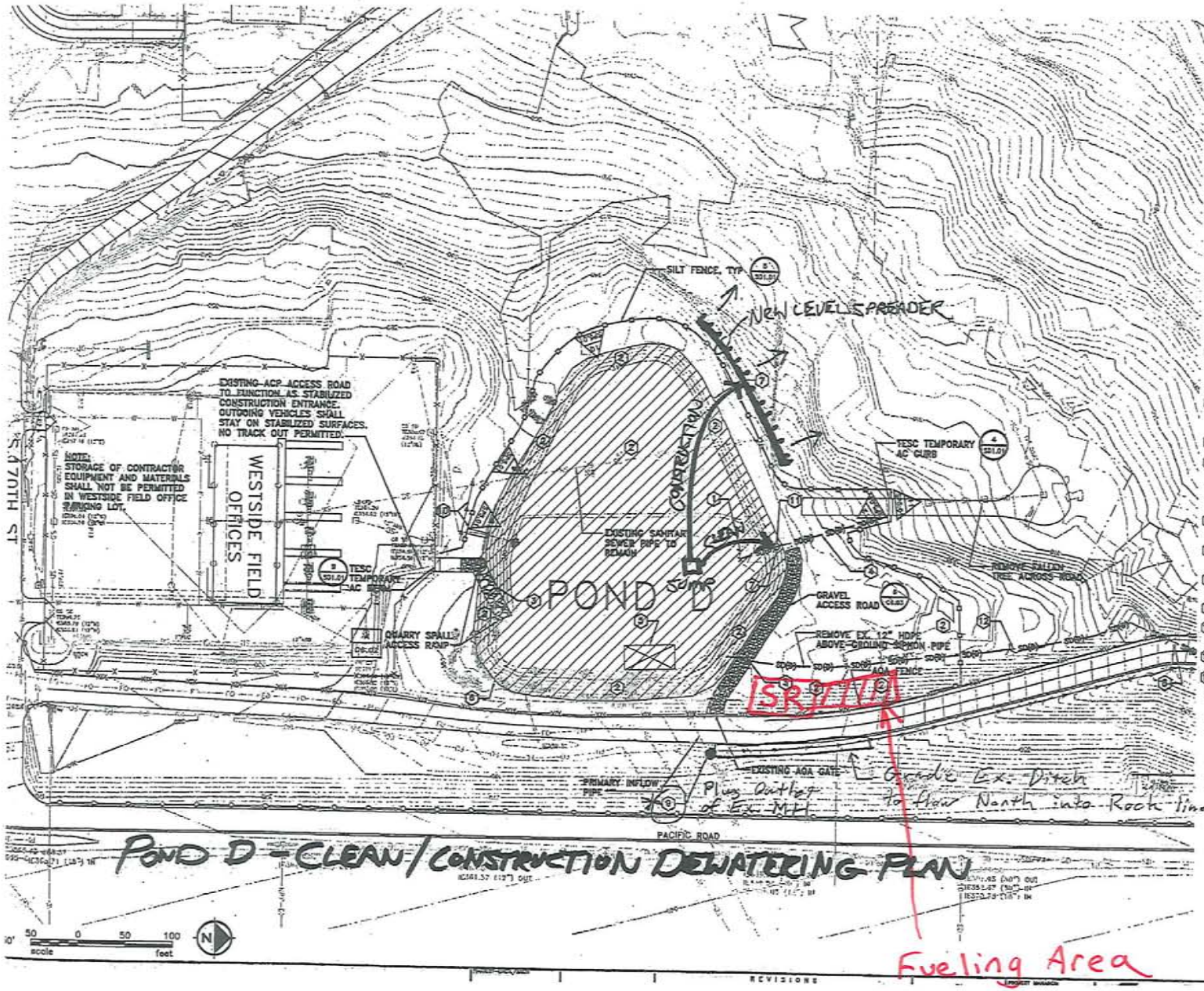
LEGEND:

- SILT FENCE (5/SD1.01)
- COVENANT LINE – ALL CONTRACTOR WORK SHALL BE CONFINED TO AREAS OUTSIDE OF COVENANT LINE UNLESS OTHERWISE DIRECTED
- WETLAND BOUNDARY
- SD(D) REMOVE EXISTING STORM DRAIN
- P(D) REMOVE EXISTING ELECTRICAL CONDUIT
- OP(D) REMOVE EXISTING OVERHEAD POWER LINES
- TEMPORARY STORMWATER CONVEYANCE
- PROVIDE INLET STRUCTURE PROTECTION (2/SD1.01)
- GROUNDWATER MONITORING WELL– EXISTING MONITORING WELL TO REMAIN DURING CONSTRUCTION.

CONSTRUCTION NOTES:

1. REMOVE INLET PIPING TO EXISTING STRUCTURE. EXISTING STRUCTURE TO REMAIN.
2. CLEAR AND GRUB ALL AREAS TO RECEIVE PROPOSED LINER, CRUSHED SURFACING, QUARRY SPALL, POND NETTING. AREAS OUTSIDE OF THIS FOOTPRINT THAT ARE TO RECEIVE EXCAVATED MATERIALS SHALL BE CLEARED ONLY.
3. INSTALL PROPOSED GRAVEL ACCESS ROAD AND QUARRY SPALL ACCESS RAMP PRIOR TO IN-POND WORK. SEE SHEET C4.01 FOR GRADING PLAN.
4. INSTALL TEMPORARY PLUG ON OUTLET PIPE OF EXISTING MANHOLE.
5. REMOVE POWER/LIGHT POLE AND OVERHEAD WIRES BETWEEN POWER POLES. VERIFY POWER HAS BEEN DISCONNECTED PRIOR TO DEMOLITION.
6. REMOVE EXISTING 6-INCH POWER CONDUIT. PORTIONS OF CONDUIT ARE PARTIALLY BURIED. VERIFY POWER HAS BEEN DISCONNECTED PRIOR TO DEMOLITION.
7. INSTALL SUMP IN LOCATION OF PROPOSED FOREBAY. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PIPING AND PUMP AS REQUIRED TO CONVEY CONSTRUCTION STORMWATER TO AN APPROVED ON-SITE STORAGE PRIOR TO HAULING AND DISPOSAL. SEE SHEET G1.01 FOR STORMWATER PHASING REQUIREMENTS.
8. REMOVE EXISTING POND NETTING, SUPPORT CABLES, ANCHORS, AND ASSORTED FITTINGS.
9. REMOVE EXISTING 12-INCH ABOVE-GROUND HDPE PIPING AND PVC CONDUIT.
10. EXISTING 36-INCH STORM DRAIN BETWEEN MANHOLES TO REMAIN.
11. EXISTING STRUCTURE TO REMAIN. REMOVE EXISTING RISER PIPING, FITTINGS, AND VALVE WITHIN STRUCTURE.
12. REMOVE EXISTING 24-INCH STORM DRAIN PIPES.
13. REMOVE EXISTING 18-INCH STORM DRAIN PIPE.
14. INSTALL APPROX. 200 LF OF TESC LINED SWALE TO DRAIN FROM EXISTING MANHOLE TO EXISTING DRAINAGE DITCH TO SOUTH.
15. ABANDON EXISTING CULVERT UNDER PERIMETER ROAD. PLUG BOTH ENDS OF CULVERT.
16. REMOVE AND SALVAGE EXISTING DEBRIS CAGE FOR REINSTALLATION.
17. REMOVE EXISTING CHAIN LINK FENCE.
18. REMOVE EXISTING 6-INCH, 8-INCH, AND 12-INCH PVC PIPE AND PIPE FITTINGS (APPROX. 4' COVER).
19. REMOVE EXISTING STORM DRAIN MANHOLE.

Spill Response Kits



NOTES:

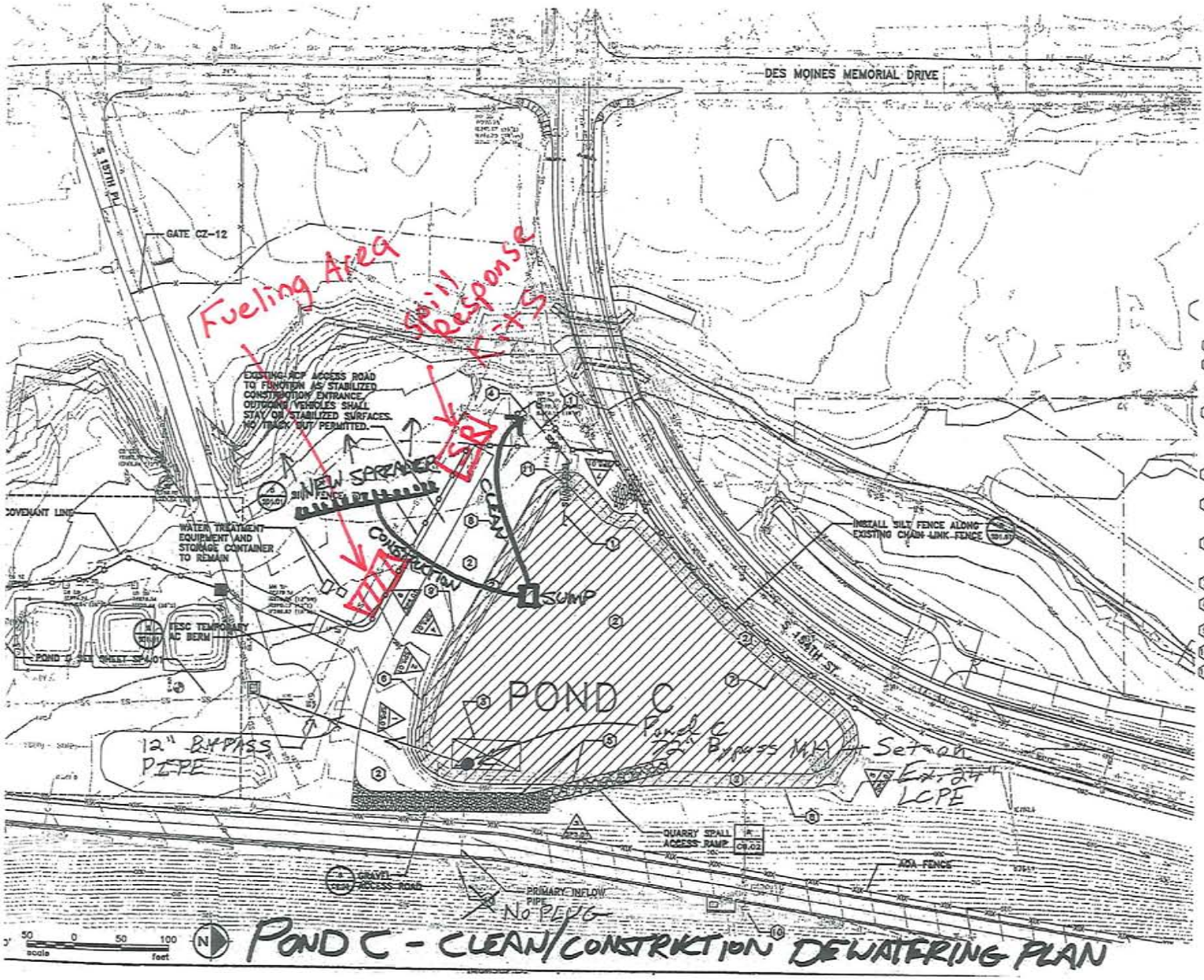
1. SEE SHEET SD1.01 FOR TESC STANDARD DETAILS.
2. SEE SHEET GP1.02 FOR PROJECT HAUL ROUTES.
3. SEE SHEET G0.01 FOR ABBREVIATIONS AND GENERAL LEGEND.
4. SEE SHEETS SP5.01 AND SP5.02 FOR EXISTING CONDITIONS PHOTOS.
5. EXISTING ELECTRICAL CONDUIT TO BE DEMOLISHED MAY OR MAY NOT CONTAIN COPPER CONDUCTOR.

LEGEND:

- SILT FENCE (5 / SD1.01)
- COVENANT LINE – ALL CONTRACTOR WORK SHALL BE CONFINED TO AREAS OUTSIDE OF COVENANT LINE UNLESS OTHERWISE DIRECTED
- WETLAND BOUNDARY
- REMOVE EXISTING STORM DRAIN
- TEMPORARY STORMWATER CONVEYANCE

CONSTRUCTION NOTES:

1. REMOVE EXISTING DEBRIS BARRIER AND INLET PIPING TO EXISTING OUTLET CONTROL STRUCTURE.
2. CLEAR AND GRUB ALL AREAS TO RECEIVE PROPOSED LINER, CRUSHED SURFACING, QUARRY SPALL, AND POND NETTING. AREAS OUTSIDE OF THIS FOOTPRINT THAT ARE TO RECEIVE EXCAVATED MATERIALS SHALL BE CLEARED ONLY.
3. INSTALL PROPOSED GRAVEL ACCESS ROAD AND QUARRY SPALL ACCESS RAMP PRIOR TO IN-POND WORK. SEE SHEET C2.01 FOR GRADING PLAN.
4. REMOVE EXISTING 18-INCH STORM DRAIN AND TRASH RACK.
5. INSTALL SUMP IN LOCATION OF PROPOSED FOREBAY. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PIPING AND PUMP AS REQUIRED TO CONVEY CONSTRUCTION STORMWATER TO AN APPROVED ON-SITE STORAGE PRIOR TO HAULING AND DISPOSAL. SEE SHEET G1.01 FOR STORMWATER PHASING REQUIREMENTS.
6. REMOVE EXISTING POND NETTING, SUPPORT CABLES, ANCHORS, AND ASSORTED FITTINGS.
7. EXISTING MANHOLE TO REMAIN. REMOVE EXISTING RISER PIPING, FITTINGS, AND VALVE WITHIN STRUCTURE.
8. ABANDON EXISTING CULVERT UNDER PERIMETER ROAD. PLUG BOTH ENDS OF CULVERT.
9. PROVIDE TEMPORARY PLUG ON OUTLET PIPE OF EXISTING STRUCTURE.
10. PROVIDE TEMPORARY SAND BAG DIVERSION AT EXISTING FLUME. INSTALL 50 LF TESC GRASS LINED SWALE TO DIVERT FLOW TO WEST.
11. REMOVE AND SALVAGE EXISTING DEBRIS CAGE FOR REINSTALLATION.
12. SEE SHEET G1.01 FOR SIPHON PIPE DEMOLITION PLAN.



POND C - CLEAN/CONSTRUCTION DEWATERING PLAN

NOTES:

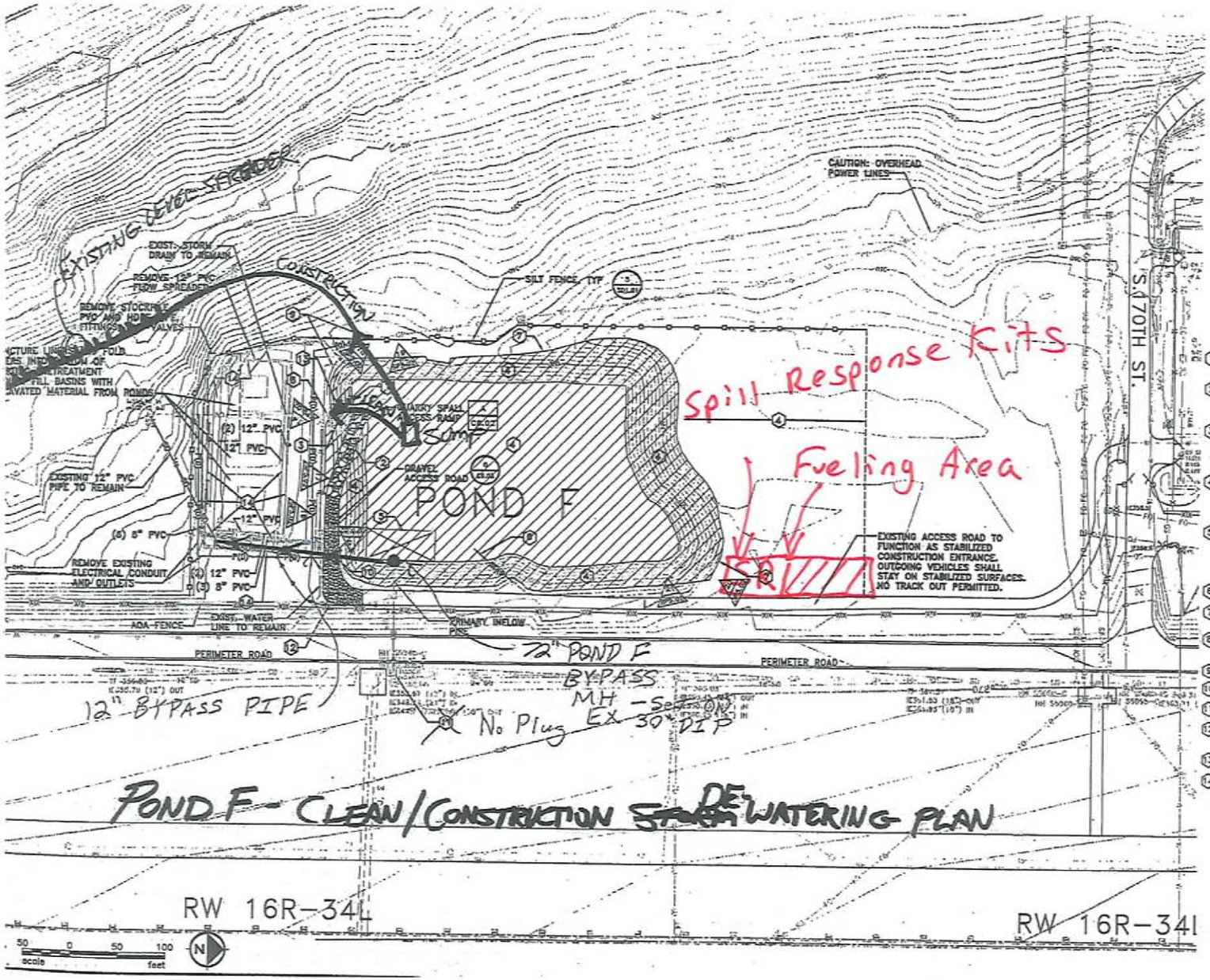
1. SEE SHEET SD1.01 FOR TESC STANDARD DETAILS.
2. SEE SHEET GP1.02 FOR PROJECT HAUL ROUTES.
3. SEE SHEET G0.01 FOR ABBREVIATIONS AND GENERAL LEGEND.
4. SEE SHEET SP5.01 FOR EXISTING CONDITIONS PHOTOS.
5. EXISTING ELECTRICAL CONDUITS TO BE DEMOLISHED MAY OR MAY NOT CONTAIN COPPER CONDUCTOR.

LEGEND:

- SILT FENCE (5 / SD1.01)
- COVENANT LINE – ALL CONTRACTOR WORK SHALL BE CONFINED TO AREAS OUTSIDE OF COVENANT LINE UNLESS OTHERWISE DIRECTED
- WETLAND BOUNDARY
- REMOVE EXISTING STORM DRAIN
- TEMPORARY STORMWATER CONVEYANCE
- PROVIDE INLET STRUCTURE PROTECTION (2 / SD1.01)

CONSTRUCTION NOTES:

1. REMOVE EXISTING OUTLET 12" AND 18" OUTLET PIPING FROM POND.
2. CLEAR AND GRUB ALL AREAS TO RECEIVE PROPOSED LINER, CRUSHED SURFACING, QUARRY SPALL, AND POND NETTING. AREAS OUTSIDE OF THIS FOOTPRINT THAT ARE TO RECEIVE EXCAVATED MATERIALS SHALL BE CLEARED ONLY.
3. INSTALL SUMP IN LOCATION OF PROPOSED FOREBAY. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PIPING AND PUMP AS REQUIRED TO CONVEY CONSTRUCTION STORMWATER TO AN APPROVED ON-SITE STORAGE PRIOR TO HAULING AND DISPOSAL. SEE SHEET G1.01 FOR STORMWATER PHASING REQUIREMENTS.
4. INSTALL TEMPORARY PLUG ON OUTLET PIPE OF EXISTING MANHOLE TO PREVENT DISCHARGE FROM POND DURING CONSTRUCTION.
5. INSTALL PROPOSED GRAVEL ACCESS ROAD AND QUARRY SPALL ACCESS RAMP PRIOR TO IN-POND WORK. SEE SHEET C1.01 FOR GRADING PLAN.
6. REMOVE POWER POLE, CONTROL PANEL, AND OVERHEAD WIRES BETWEEN POLE AND MAIN LINE. VERIFY POWER HAS BEEN DISCONNECTED PRIOR TO DEMOLITION.
7. REMOVE EXISTING 6" PVC PIPE TO TOE OF SLOPE.
8. REMOVE EXISTING POND NETTING, SUPPORT CABLES, ANCHORS, AND ASSORTED FITTINGS.
9. REMOVE EXISTING PIPE AND PIPE FITTINGS.
10. PROVIDE TEMPORARY PLUG ON OUTLET PIPE OF EXISTING STRUCTURE.
11. EXISTING STRUCTURE TO REMAIN. REMOVE EXISTING RISER PIPING, FITTINGS, AND VALVE WITHIN STRUCTURE. REMOVE AND SALVAGE EXISTING DEBRIS CAGE FOR REINSTALLATION.



NOTES:

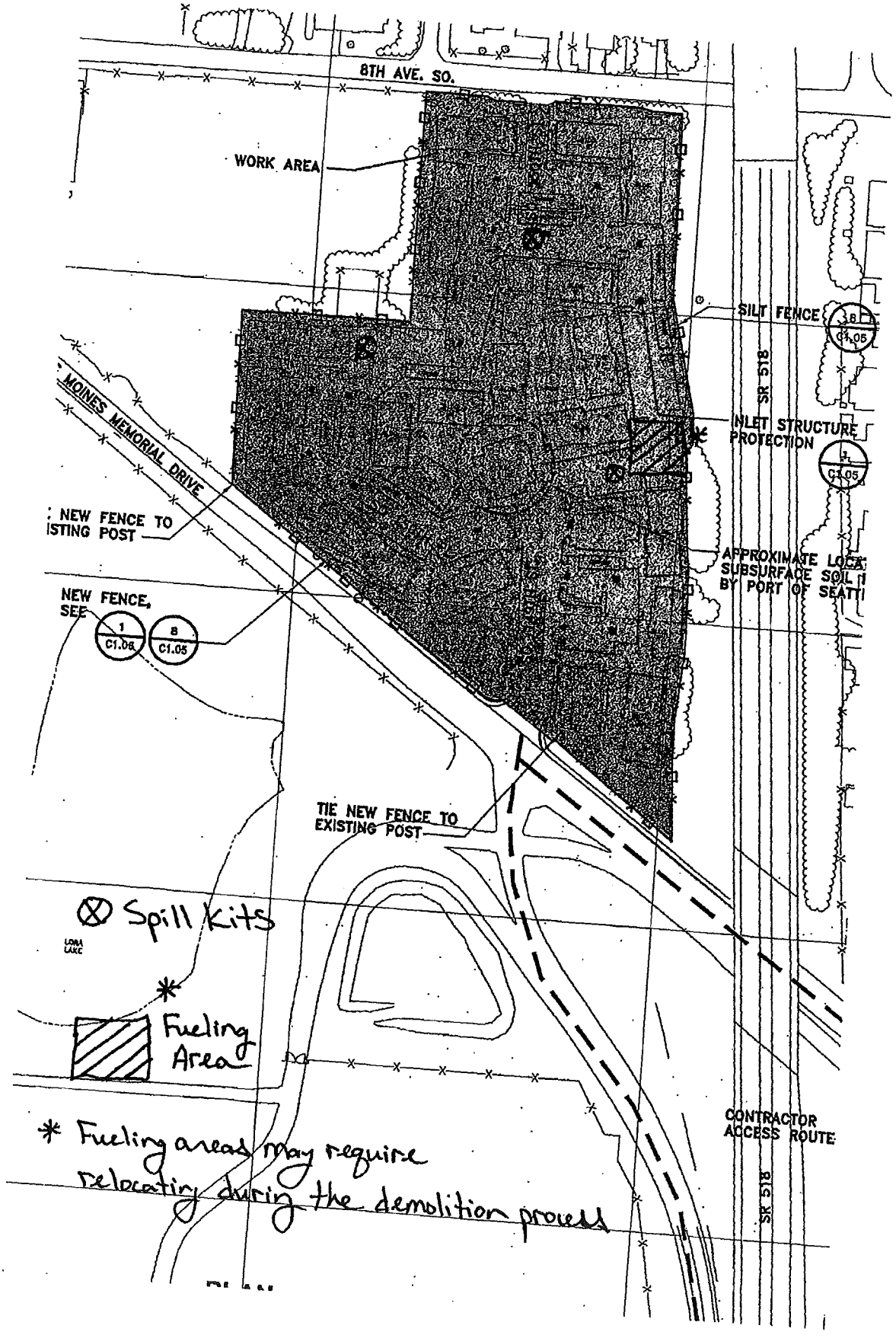
1. SEE SHEET SD1.01 FOR TESC STANDARD DETAILS.
2. SEE SHEET GP1.02 FOR PROJECT HAUL ROUTES.
3. SEE SHEET G0.01 FOR ABBREVIATIONS AND GENERAL LEGEND.
4. SEE SHEET SP5.02 FOR EXISTING CONDITIONS PHOTOS.
5. EXISTING ELECTRICAL CONDUITS TO BE DEMOLISHED MAY OR MAY NOT CONTAIN COPPER CONDUCTOR.

LEGEND:

- SILT FENCE (5 / SD1.01)
- COVENANT LINE — ALL CONTRACTOR WORK SHALL BE CONFINED TO AREAS OUTSIDE OF COVENANT LINE UNLESS OTHERWISE DIRECTED
- WETLAND BOUNDARY
- REMOVE EXISTING STORM DRAIN
- TEMPORARY STORMWATER CONVEYANCE
- REMOVE EXISTING ELECTRICAL CONDUIT

CONSTRUCTION NOTES:

1. REMOVE INLET PIPING TO EXISTING STRUCTURE. EXISTING STRUCTURE TO REMAIN.
2. INSTALL PROPOSED GRAVEL ACCESS ROAD AND QUARRY SPALL ACCESS RAMP PRIOR TO IN-POND WORK. SEE SHEET C3.01 FOR GRADING PLAN.
3. EXISTING STRUCTURE TO REMAIN. REMOVE EXISTING RISER PIPING, FITTINGS, AND VALVE WITHIN STRUCTURE. INSTALL TEMPORARY PLUG ON OUTLET PIPE OF CONTROL STRUCTURE TO PREVENT DISCHARGE FROM POND DURING CONSTRUCTION.
4. CLEAR AND GRUB ALL AREAS TO RECEIVE PROPOSED LINER, CRUSHED SURFACING, QUARRY SPALL, AND POND NETTING. AREAS OUTSIDE OF THIS FOOTPRINT THAT ARE TO RECEIVE EXCAVATED MATERIALS SHALL BE CLEARED ONLY.
5. INSTALL SUMP IN LOCATION OF PROPOSED FOREBAY. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PIPING AND PUMP AS REQUIRED TO CONVEY CONSTRUCTION STORMWATER TO AN APPROVED ON-SITE STORAGE PRIOR TO HAULING AND DISPOSAL. SEE SHEET G1.01 FOR STORMWATER PHASING REQUIREMENTS.
6. REMOVE EXISTING 18" STORM DRAIN BACK TO EXISTING MANHOLE.
7. REMOVE EXISTING POND NETTING, SUPPORT CABLES, ANCHORS, AND ASSORTED FITTINGS.
8. EXISTING MANHOLE AND LOW FLOW WELL EQUIPMENT TO REMAIN IN SERVICE AT ALL TIMES.
9. EXISTING POWER POLE AND ELECTRICAL EQUIPMENT TO REMAIN.
10. REMOVE EXISTING ELECTRICAL CONTROL PANEL AND CONDUIT.
11. INSTALL TEMPORARY PLUG ON OUTLET PIPE OF EXISTING STRUCTURE.
12. PROVIDE TEMPORARY STORMWATER CONVEYANCE BETWEEN PLUGGED STRUCTURE AND EXISTING 12" PVC PIPE.
13. REMOVE AND SALVAGE EXISTING DEBRIS CAGE FOR REINSTALLATION.
14. REMOVE EXISTING 8-INCH, 8-INCH, AND 12-INCH PVC PIPE, CONDUIT, AND FITTINGS (APPROX. 4-FT COVER).


8TH AVE. SO.
WORK AREA
SILT FENCE
SR 518
MOINES MEMORIAL DRIVE
NLET STRUCTURE PROTECTION
NEW FENCE TO ISTING POST
APPROXIMATE LOCA SUBSURFACE SOIL BY PORT OF SEATT
NEW FENCE, SEE
TIE NEW FENCE TO EXISTING POST
Spill Kits
Fueling Area
CONTRACTOR ACCESS ROUTE
* Fueling areas may require relocating during the demolition process

APPENDIX A

SUBCONTRACTOR ACKNOWLEDGEMENT

CONTRACTOR ACKNOWLEDGEMENT

The signatures below acknowledge that they have read, understand, and will comply with the requirements of the plan.

Signature/Date

Leonard Spadoni
Ceccanti, Inc. PM/Health and Safety Rep

Signature/Date

Al Ausbun, Sr.
Ceccanti, Inc. Project Superintendent

CONTRACTOR ACKNOWLEDGEMENT

The signatures below acknowledge that they have read, understand, and will comply with the requirements of the plan.

Deanna Peters

Signature/Date 7-24-09

Deanna Peters
RW Rhine PM/Health and Safety Rep

Gilbert Olson Jr

Signature/Date 7-24-09

Gil Olson, Jr.
RW Rhine Project Superintendent

APPENDIX B

SPILL REPORT FORM

OIL SPILL REPORT FORM	**Facility:** LORA LAKE APARTMENTS **Date:** **Page**
Facility Address: 15001 DES MOINES MEMORIAL DRIVE, BURIEN, WASHINGTON	
Incident Date/Time/Duration:	
Type of Product Released:	
Quantity Released:	
Cause of Release:	
Immediate Action Taken:	
Preventative Measures Added:	
Offsite Impacts:	
Other Comments:	

OIL SPILL REPORT FORM

Facility: LORA LAKE APARTMENTS
Data:
Page

Date/Time of Call:
Agency Contacted:
Official Contacted:
Phone #:
Person Reporting:
Comments:

Date/Time of Call:
Agency Contacted:
Official Contacted:
Phone #:
Person Reporting:
Comments:

Date/Time of Call:
Agency Contacted:
Official Contacted:
Phone #:
Person Reporting:
Comments:

Date/Time of Call:
Agency Contacted:
Official Contacted:
Phone #:
Person Reporting:
Comments:

TESC/CONSTRUCTION STORMWATER MONITORING PLAN

2009 Airfield Improvement Projects – Contract 1
Lora Lake Apartment Demolition – Phase 2 (200065)
June 15, 2009

APPLICABLE PERMITS AND CERTIFICATIONS

The work described in this monitoring plan is conducted pursuant to the requirements of the permits and/or certifications listed below, as well as the provisions listed in Port of Seattle contract specifications (as indicated):

- Master Plan Update Improvements Seattle-Tacoma International Airport—Biological Assessment (June 2000)
- Master Plan Update Improvements Project Section 401 Water Quality Certification Order #1996-4-02325 Amended-2 (June 7, 2004)
- Port of Seattle Master Specification 02270—Temporary Erosion and Sediment Control Planning and Execution (February 8, 2002)
- Seattle-Tacoma International Airport National Pollution Discharge Elimination System (NPDES) Permit No. WA-002465-1—Special Conditions Part III: Construction Stormwater Discharge Limitations and Monitoring (April 1, 2009)
- State of Washington Department of Ecology Administrative Order—Companion Order No. 1680 Associated with Individual NPDES Permit No. WA-002465-1 (September 15, 2004)
- State of Washington Governor's Certification—Submitted to U.S. Department of Transportation, certifying compliance of Port of Seattle Master Plan Update with 49 U.S.C. 47101 et seq. (June 30, 1997)

ACTIVITIES PRIOR TO SITE WORK

Project Summary

This project involves demolition of the existing Lora Lake Apartment complex located in the Northwest vicinity of SeaTac International Airport (STIA). The project area is bordered on the east by Des Moines Memorial Drive, the west by 8th Avenue South, and the north by SR 518 (see Figure 1). The work monitored under this plan includes installation of temporary erosion and sediment control (TESC) measures; disconnection, salvage, and demolition of existing utilities; demolition of all existing wood-frame buildings, structures, poles, and miscellaneous items to ground level (concrete slabs and building foundations shall remain undisturbed); and installation of construction fence around demolished building footings. Ground disturbing activities, including excavation will be minimized to the maximum extent possible. All construction water and stormwater runoff from unstabilized construction areas will be contained and prevented from exiting the work area.

Construction Phasing

Master Spec 02270-1.07.F—The contractor will not clear, grub, grade, or perform any earthwork until all structural erosion and sediment control BMPs have been installed per contract plans or as

directed by the Engineer/ Port inspector.

The Port's inspector will verify that BMPs are in place prior to construction activities in each area.

Requirements met (as applicable):

- *NPDES Part III S.6.B.1.b.iii* and *S.6.B.1.b.iv—Verification of BMPs required for all projects disturbing 1 acre or more.*
- *401 Certification H.3—Verification of BMPs required for Master Plan projects.*

No Discharge

Stormwater runoff from the Lora Lake Apartment demolition activities will be contained and collected on-site during construction. Due to the potential for contaminated site runoff, the following four municipal and commercial entities have been identified as potential locations for treatment and disposal of the collected runoff:

- Southwest Suburban Sewer District
- King County Wastewater Treatment Division
- Emerald Services
- Philips Environmental (PSC)

The Contractor selected for this project will be responsible for obtaining discharge authorization from one (or more) of these entities, as necessary. Any analytical characterization of the collected runoff required by the entity selected will be performed prior to disposal.

Uncontrolled site discharges from the project areas are not allowed. However, in the event that an unanticipated discharge occurs, monitoring will be performed at the locations identified below, Ecology will be notified, and corrective actions will be taken.

Identification of Relevant Stormwater Points

The Outfall Discharge Locations identified in this document are points at which direct conveyances of runoff from ongoing active work areas discharge to the receiving water. Water is considered "site discharge" and will be monitored only if it has been in contact with an open work area (i.e., disturbed ground due to construction activities) and is conveyed directly through surface flow to the receiving water.

All sampling locations will be adequately identified and staked or flagged.

Miller Creek

All work for this project will be conducted within the Miller Creek drainage subbasins. Stormwater runoff is to be contained on-site; uncontrolled site discharges from the project area are not allowed. In the event an uncontrolled site discharge occurs, runoff will be conveyed to Miller Creek via the existing municipal storm drainage system and Lora Lake. Relevant

stormwater monitoring points have been identified as follows (see Figure 1):

1. Outfall Discharge Location: *Lora Lake Outfall*—The municipal storm drainage outfall located in the northwest corner of Lora Lake.

   Point upstream of the discharge to receiving water: *Lora Lake Upstream*—In Miller Creek, at the upstream side of the King County Regional Detention Facility outfall control weir.

   Point downstream of the discharge to receiving water: *Lora Lake Downstream*—In Lora Lake, at the connection to Miller Creek.

Monitoring Plan Submission

NPDES Part III S.6, S.6.B.2, and 401 Certification K.8—The monitoring plan will be submitted to Ecology for review 30 days before start of construction. Any subsequent revisions to the monitoring plan will be submitted to Ecology for review 30 days before implementation of the revision.

ACTIVITIES DURING SITE WORK

Visual Inspections

Spec 02270-3.02.F—The contractor will visually inspect all TESC BMPs weekly and after any rain event of 0.5 inch or greater between April 1st and September 30th; and daily and after any rain event of 0.5 inch or greater between October 1st and March 31st. Deficiencies identified during the inspection shall be corrected within 24 hours or as directed by the Engineer. Necessary repairs, improvements, or additional BMPs will be identified and implemented; runoff leaving the site during storms will be observed and checked for turbid water; streets surrounding site will be checked for dirt tracking; and the site will be inspected for dust during dry periods.

Requirements met (as applicable):

- *NPDES Part III S.6.B.1.c—Visual inspections required for all projects disturbing 1 acre or more.*
- *401 Certification H.5—Visual inspections required for Master Plan projects.*

Pollution Control Officer

An independent qualified pollution control officer will inspect BMPs and advise on compliance with applicable water quality standards.

Independent Pollution Control Officer:
The Phoinix Corporation
(206) 799-0480

Requirements met (as applicable):

- *401 Certification H.1—Independent pollution control officer required for Master Plan projects.*
- *Governor's Certification 3(e)—Independent pollution control officer required for Master Plan projects.*

Construction Stormwater Monitoring

The Port will perform stormwater monitoring as summarized in Table 1.

Table 1. Construction Stormwater Monitoring Summary

Parameter	Monitoring Location(s)		
[Miller Creek]			
[Lora Lake Apartment Demo]	**Municipal Outfall to Lora Lake**	**Lora Lake Upstream**	**Lora Lake Downstream**
Turbidity [1]	✓	✓	✓
pH [1, 2]	✓	✓	✓
Visible Sheen & Total Petroleum Hydrocarbons (Oil and Grease) [3]	✓		
Precipitation and Flow [4]	✓		
Temperature [5]		✓	✓

1. NPDES Part III S.1.B and 401 Certification K.3—For non-chemical/non-CESF treated stormwater discharges, after any rain event of at least 0.5 inches or more in a 24-hour period, the Port will measure turbidity and pH at the outfall discharge location, the point upstream of the discharge to receiving water, and the point downstream of the discharge to receiving water

2. The work monitored under this plan may involve construction-related human-caused activities that could affect the pH of stormwater. Such human-caused activities that could affect the pH of stormwater include, but are not limited to, the pouring exposed concrete in significant quantities.

3. NPDES Part III S.1.B and 401 Certification K.3—For non-chemical/non-CESF treated stormwater discharges, the Port will observe if a visual sheen is present at the outfall discharge location after any rain event of at least 0.5 inches or more in a 24-hour period. If sheen is present, then oil and grease samples will be analyzed using Method NWTPH-Dx (Washington State Department of Ecology).

4. NPDES Part III S.1.B—For non-chemical/non-CESF treated stormwater discharges, after any rain event of at least 0.5 inches or more in a 24-hour period, precipitation and flow records for each monitored event will be collected.

5. 401 Certification K.3—The Port will measure temperature upstream and downstream of the outfall discharge location weekly during the months of July, August, and September. Background temperature will be measured at a point unaffected by the discharge and representative of the highest ambient water temperature in the vicinity of the discharge.

NPDES Part III S.2.C—For each sample, the Port will record:

1) Date, exact place, method, and time of sample;
2) Name of person who took the sample;
3) Dates of any analyses conducted in a lab;
4) Name of person who conducted lab analysis;
5) Analytical method used in lab; and
6) Results of lab analysis.

The sampling points identified in this monitoring plan will be monitored only if construction activities (i.e., clearing, grading, excavation, or any other activities that disturb the surface of the ground) are ongoing within a specified work area and both a site discharge and outfall discharge are occurring. If any of the locations previously described are not accessible, monitoring will be

conducted at the most immediately accessible point near these points, subject to the same collected flows.

The turbidity and pH values at the point downstream of the outfall discharge location will be compared to the values at the point upstream of the outfall discharge location. If the downstream values do not fall within the acceptable range[1], source tracing will be performed within the Outfall Discharge Location tributary basin to identify the source of the turbidity increase and/or pH variation and apply corrective action. Note that source tracing may identify non-Port discharges. If the source is determined to be a non-Port discharge, no further source identification will be conducted and the non-Port discharge shall be documented and reported to Ecology.

Single grab samples will be collected and analyzed on-site. Turbidity and pH will be measured with commercially available portable meters, using appropriate methods [Turbidity (Nephelometric Method, *Standard Methods* number 2130B or equivalent); pH (Electrometric Method, Standard Methods number 4500-H^+ B, or equivalent)]. Meters will be maintained and calibrated according to manufacturer's guidelines.

Note that the analytical method NWTPH-Dx (Washington State Department of Ecology) selected for oil and grease analysis results in diesel- and motor oil-range quantitations, the sum of which is considered to be total petroleum hydrocarbons (TPH). The laboratory performing the analysis will use an approved silica gel/sulfuric acid cleanup procedure, in order to eliminate any non-petroleum bias (e.g., contributions from fats, vegetative matter, etc.).

ACTIVITIES AFTER PROJECT COMPLETION

Site Assessment

The Port will verify that permanent cover practices (i.e., hydroseeding, etc.) are in place and that no petroleum sheen is observed.

Follow-Up Inspection

NPDES Part III S.6.B.1.b.v—The Port will perform a follow-up inspection 30 days after project completion to verify that no sedimentation or erosion problems exist, permanent cover practices have been implemented properly, and all temporary BMPs have been removed.

REPORTING AND RECORDKEEPING REQUIREMENTS

Routine Reporting

The Port will submit monitoring results to Ecology every month.

Requirements met (as applicable):

- *NPDES Part III S.2.A—Reporting requirements for projects of 1 acre or more.*

[1] pH: Within the range of 6.5 to 8.5.

Turbidity: Less than or equal to 5 NTU over background (upstream) turbidity when background is 50 NTU or less. Less than or equal to a 10 percent increase above background when background turbidity is greater than 50 NTU.

- *401 Certification K.6—Reporting requirements for Master Plan projects.*

NPDES Part III S.2.B—The Port will retain monitoring documentation (including records of calibration) for a period of 3 years.

Noncompliance Notification

Water quality violations will be immediately reported to the Ecology Northwest Regional Office (425-649-7229).

In addition, any water quality violation and/or release of turbid water from final BMPs must be reported to each of the following departments of the Port of Seattle through the contacts listed as follows:

1) Aviation Environmental Department

Primary Contact:	**Secondary Contact:**
Sarah Kittleson	Bob Duffner
Surface Water Manager	Water Resources Manager
Office Phone: 206-248-7137	Office Phone: 206-988-5528
Mobile Phone: 206-605-0662	Mobile Phone: 206-979-2853

2) Engineering Department

David Jenkins
Erosion Control Engineer
Office Phone: 206-431-4958
Mobile Phone: 206-423-1509

Parametrix 558-2745-003/01(01) 6/09 (B)

N

NOT TO SCALE

Figure 1
Lora Lake Apartment Demo
Instream Monitoring Locations