PLAN OF OPERATIONS

CRUSHED MATERIAL REMOVAL

Kimberly-Clark Former Mill Property, Everett, Washington

Prepared for: Kimberly-Clark Worldwide, Inc.

FINAL July 10, 2018

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1 Introduction

Kimberly-Clark Worldwide, Inc. (K-C) has prepared this Plan of Operations to guide excavation, transportation and disposal activities associated with the planned removal of the Crushed Material (CM) previously used to fill voids and restore a uniform, drivable, pervious surface following the mill wide demolition activities that occurred in 2012/2013 on the former Kimberly-Clark pulp and paper mill property (Property). The Property is located at 2600 Federal Avenue in Everett, Washington. Reference **Kimberly-Clark Everett, CM Removal Plans, Sheet 1, Site Plan - Existing Conditions**. The project will involve excavation activity on approximately 32 acres of the 56 acre upland portion of the 67 acre former Mill Site. The Property has perimeter fencing and controlled access gates that remain locked at all times unless scheduled activities are occurring. The general public is not allowed on the Property and will not be permitted to access the Property during the planned removal activities.

K-C proposes this Plan in response to the Washington Department of Ecology's (Ecology) letter dated 1/24/18 indicating that Ecology will require the CM to be removed and in response to Snohomish County Health District's request that a Plan of Operations on how to do so be prepared.

1.1 Plan Organization

The Plan of Operations is organized into the following sections:

- **Section 2—Timing** presents a brief description of the expected timing associated with the planned activity.
- **Section 3—Property Conditions** presents a brief description of the material being removed, the underlying fill and the known contaminated areas within the underlying fill.
- **Section 4—Permits and Other Requirements** describes permitting requirements for conducting the CM removal activities.
- **Section 5—Generalized Approach for Crushed Material removal** describes the generalized site activities, erosion and sediment controls, dewatering and water management, CM excavation and handling.
- **Section 6—Material Management/Dispositioning** identifies preliminary options for off-Property disposal of crushed material, contaminated soil (if any) and groundwater which will be encountered during the CM removal activities conducted on the Property.
- **Section 7—Grading/Backfill** provides a brief description of the grading and back filling necessary to re-establish a uniform drivable pervious surface after the CM has been removed.

2 Project Timing

This section discusses the expected timelines involved in the permitting and removal of the CM at the K-C Property to achieve that goal. K-C anticipates that an excavation project of this magnitude can be completed with necessary permitting within 18 months.

2.1 Permitting

Environmental review and permitting necessary to approve the work proposed in this Plan of Operations could vary depending on the specific permits required. K-C will work with jurisdictional agencies to obtain these determinations.

2.2 CM Removal

In accordance with K-C's Corporate Sustainability Guidelines, K-C intends for the CM to be reused or recycled by others to the maximum extent feasible. The amount of material that can be reused or recycled will depend on the availability of acceptable reuse/recycle companies that are approved, willing and able to receive the CM as it is generated from the Property. Since local recycling companies' material acceptance rates are dependent on variables which are not necessarily fixed or predictable, such as recyclers' storage space and rates of sale, K-C intends to use local landfills to handle the necessary overflow in order to commit to completing this removal activity within 12 months from permit issuance.

3 Property Conditions

This section provides a summary description of the materials planned for excavation as well as information on the underlying historic fill materials and Property conditions that could be encountered during the removal activity.

3.1 Crushed Material

This section discusses the crushed material (CM) to be removed from the Property. The CM was sourced from concrete, brick and masonry that came from buildings, structures and other improvements on the former K-C mill site. The source material was source separated and crushed and screened to the market size of 4 in minus.

3.2 Subsurface Conditions

This section provides a general description of the subsurface conditions under or around the CM placement area that may have relevance for conducting the removal activities. The local topography surrounding the Property slopes westward toward the Waterway. Property ground surface elevations above NAVD88 range from approximately 17 to 19 feet along the eastern boundary to approximately 13 to 17 feet on the western boundary.

A wedge of historic fill, generally thickening from east to west, comprises the shallow subsurface soils under the CM at the Property. The historic fill was placed on the Waterway tidal flats to create new upland beginning in the early 1900s. Within the west-center portion of the Upland Area, a former log pond was filled in stages between the mid-1950s and early 1980s to create land for wood chip and hog fuel storage. The fill across the Property has variable composition, predominantly including sand and silty sand with shell fragments, and localized occurrences of gravel, variable debris, and wood.

A shallow unconfined (water table) water-bearing zone occurs within the fill, overlying siltier native tidal flat deposits. The water table is relatively shallow, generally ranging in depth from 2 to 6 feet below grade in the eastern portion of the Property to 8 to 15 feet below grade in the western portion. Groundwater in the fill is hydraulically connected to the Waterway, and groundwater within 150 to 200 feet of shoreline fluctuates in response to tidal fluctuations.

3.3 Potential Subsurface Contamination in Soils

Extensive site characterization activities in support of the Ecology directed Remedial Investigation and Feasibility Study (RI/FS) have been conducted under the MTCA Agreed Order and are available for viewing at: https://fortress.wa.gov/ecy/gsp/CleanupSiteDocuments.aspx?csid=2569.

The data used in the RI/FS were collected during the independent Phase 2 ESA, RCRA closure, IA, and RI characterization activities and represent current conditions for the Site on which the work area exists, following the 2013-2014 Interim Action (IA) where approximately 38,450 tons of contaminated material were permanently removed from 15 discrete areas of the Property. In all, the RI/FS data set includes the following approximate numbers of samples and chemical analyses:

- 1,430 samples and 6,990 analyses for soil;
- 49 samples and 260 analyses for recycled material;
- 390 samples and 1,920 analyses for groundwater;
- 16 samples and 50 analyses for intertidal porewater and surface water; and
- 14 samples and 48 analyses for air.

As a result of this comprehensive level of investigation it has been determined that several areas of potential soil contamination still exist after previous clean-up activities and warrant additional or further clean up action in or near the work area. In order to facilitate Property redevelopment, that cleanup work is expected to occur as part of an additional Interim Action under the Agreed Order before final Site environmental cleanup is achieved.

These areas have been documented by Aspect Consulting as part of the RI/FS documentation and will be delineated on the Property prior to any CM removal action if the CM removal action occurs before the Interim Action takes place. Washington State Department of Ecology has also provided detailed maps of the area with interim action areas, groundwater pH measurements, and other factors to be watchful of through the CM removal process.

K-C will work closely with the Contractor and make use of all available documentation, maps and site plans to prevent the accidental comingling of known contamination with the CM when the removal activity occurs. It is expected that some of the CM in close proximity to contaminated soils will be too difficult to separate and will be disposed of with the underlying contaminated soils as part of the Interim Action activities.

Figure 1, Proposed Interim Action Areas is from the July 2018 Interim Action Work Plan, prepared by Aspect Consulting, and shows the locations were underlying soils have been confirmed with Ecology as needing additional soil clean up as part of the planned Interim Action as well as those locations where contaminated soils were previously removed as part of cleanup activities under the Agreed Order. Detailed information on all these areas is available in the Interim Action Work Plan prepared by Aspect.

As with any MTCA cleanup site undergoing RI/FS process, there is a routine risk of discovering contamination in underlying soils during ground disturbance activities. As with subsurface work on any land formerly used for industrial facilities, this CM removal project could encounter previously unidentified contamination in underlying soils. If potentially contaminated soil or groundwater are observed during the process, appropriate management of those environmental media and any CM in contact with it will be addressed as part of the ongoing MTCA cleanup process for the Kimberly-Clark Worldwide Site Upland Area, under the Agreed Order with Department of Ecology. In this case, K-C will promptly notify the Ecology site manager of the occurrence, and consult with Ecology regarding characterization and then appropriate management of the suspect materials under the Agreed Order.

4 Permits and Other Requirements

When performing the CM removal K-C expects to meet the requirements of Chapters 70.94 (Washington Clean Air Act), 70.95 (Solid Waste Management Act), 90.48 (Water Pollution Control), and 90.58 (Shoreline Management Act) Revised Code of Washington (RCW), and of laws requiring or authorizing local government permits or approvals.

The Site is subject to a Model Toxics Control Act (MTCA) agreed order (Agreed Order) between Ecology and K-C. The on-site actions described in this Plan of Operations must be consistent with the Agreed Order. The known requirements include the following:

1. State Water Pollution Control Act (Chapter 90.48 RCW);
2. Solid Waste Management-Reduction and Recycling (Chapter 70.95 RCW);
3. Minimum Standards for Construction and Maintenance of Wells (Chapter 173-160 RCW);
4. Washington Clean Air Act (Chapter 70.94 RCW);
5. Puget Sound Clean Air Agency Regulations (http://www.pscleanair.org);
6. Occupational Safety and Health Act (OSHA), 29 CFR Subpart 1910.120;
7. Washington Industrial Safety and Health Act (WISHA);
8. Shoreline Management Act (Chapter 90.58 RCW); and
9. State Environmental Policy Act (SEPA; Chapter 43.21C RCW, Chapter 197-11 WAC, and Chapter WAC 173-802)

4.1 Permitting and Substantive Requirements

4.1.1 State Environmental Policy Act (SEPA)

Compliance with SEPA, Chapter 43.21C RCW, will be achieved by conducting a SEPA review in accordance with applicable regulatory requirements, including WAC 197-11-268.

4.1.2 Stormwater Pollution Prevention Plan

K-C's Stormwater Pollution Prevention Plan (SWPPP) for the mill site is attached as an Appendix and has been updated to provide procedures for implementing erosion control and other stormwater pollution prevention measures during site earthwork activities. K-C shall adhere to the SWPPP when conducting the CM removal described herein.

4.1.3 City of Everett Discharge Authorization

K-C will obtain a discharge authorization (DA) from the City of Everett (City) industrial pretreatment program to allow discharge of pre-treated dewatering water if generated during the CM removal. Groundwater treatment and disposal methods are described in Section 6.2. The DA will impose daily discharge volume limitations and numerical water quality limits for effluent discharged, and it will require sampling and analysis of the discharge water, recording of the volumes discharged, and submittal of the monitoring data at the end of the

permit. Treated water not in compliance with the City discharge limits will be re-run through the treatment system until passing discharge limits or containerized, characterized, and sent for off-Site disposal.

4.1.4 City of Everett Grading Permit

Soil excavations exceeding 50 cubic yards are subject to a grading permit from the City. Substantive requirements of the grading permit include erosion control, which is addressed by the SWPPP described above.

4.1.5 Shoreline Permit

K-C will consult with the City of Everett to determine whether the removal project will require a shoreline substantial development permit.

4.2 Other Considerations and Requirements

This subsection provides a description of additional requirements that will be considered during planning and execution of CM removal activities at the site.

Utilities Protection

The work area includes subsurface utilities that were decommissioned as part of the demolition activities and active utilities that will need to be protected during removal activities (e.g., active stormwater infrastructure). Prior to initiating the planned CM removal, active subsurface utilities that require protection will be located using any combination of electromagnetic methods, reviewing utilities maps, manual post hole excavations, and, if warranted, vacuum excavation (e.g., air knife). The Utility Notification Center ("one call") utility locate service will also be contacted, to locate public utilities up to the property boundary. Active utilities will be protected to prevent damage to them.

Monitoring Well Protection and/or Decommissioning

Groundwater monitoring wells located within the footprints of CM removal excavation will be protected to allow continued use or will be properly decommissioned in accordance with the requirements of Chapter 173-160 WAC if it is deemed impractical to protect them. Protection measures may include temporary well monument removal and/or temporary sleeves installed around the piping during nearby excavation followed by height adjustment to the resulting grade after excavation/backfilling is complete and monument reinstallation. The need for replacement of any wells decommissioned during the CM removal action would be determined in consultation with the Ecology site manager for the MTCA cleanup.

5 Generalized Approach for CM removal

The CM to be removed is that material that was previously screened and crushed to a 4-inch-minus dimension and spread across approximately 32 acres of the Property at the end of the mill demolition project in 2013.

The CM removal will involve excavation and off-Property reuse or recycling of as much of the 120,000 cubic yards of CM as practicable. If insufficient reuse or recycling outlets are available to keep pace with removal conducted within the planned timeframe, some CM will be landfilled. A list of acceptable recycling vendors is provided in section 6.1.

While certain areas of the removal location will have unique physical conditions to be adapted to, this section describes the generalized procedures/approach to be conducted during the CM removal actions irrespective of location — including application of erosion and sediment controls, dewatering and water management, CM excavation and handling procedures, stockpile management, and excavation backfilling. Excavation dewatering will be conducted if needed to facilitate CM removal from below the water table.

5.1 Erosion/Sediment and Dust Controls

The construction storm water best management practices (BMPs) described in Section 3 of the SWPPP will be implemented during soil excavation, stockpiling, loading, and transportation on-Property during the removal action. Soil erosion due to precipitation runoff or run-on to or from CM excavations, stockpiles, or other soil areas exposed or disturbed throughout the CM removal activities will be prevented using berms, surface water control, straw bales, plastic covers (minimum 10-mils), or other measures appropriate for the conditions. Because pervious surfaces will exist across the entire work area, both before and after the planned CM removal, any storm water generated within the work area will infiltrate, and there will be no discharges to surface waters of the state. As is indicated in the SWPPP the designated Certified Sediment and Erosion Control Lead overseeing the removal project will monitor and maintain the BMPs and apply all available and reasonable methods to control runoff from leaving the immediate area of the CM management activity.

During the CM removal action, the Contractor will use the following BMPs as needed to minimize off-Property migration of airborne dust, soil track out, or stormwater runoff:

- Apply water to dry soils as necessary to suppress airborne dust. This may include general application of water to the ground as well as overhead spraying of water during processing and loading.
- Use BMPs identified in the SWPPP to prevent soils at the Property from entering the stormwater drainage system catch basins, or migrating off-Property (e.g., stockpiles will be covered in plastic and placed on plastic within berms);

- Maintain excavation equipment in good working order. The contractor must immediately clean up any contaminated soil resulting from spilled hydraulic oils or other hazardous materials from equipment;
- Establish specific truck haul routes before beginning off-Property transport of materials. Use on-Property truck routes that minimize or prevent traffic over potentially contaminated areas;
- Load only materials without free liquid in trucks (any CM still draining free water will not be loaded into trucks);
- Cover all loads prior to exiting the Property;
- Remove CM materials from the exterior of vehicles before they leave material-loading areas or exit the Property; and
- Verify that loaded truck weights are within acceptable limits.

5.2 Excavation Dewatering and Water Management

Construction dewatering may be conducted during the CM removal activities to dewater saturated CM to facilitate its effective excavation. Means and methods for dewatering will be determined by the contractor specific to each location needing to be dewatered, and may include temporary sumps within the open excavation, or possibly well points outside the excavation.

Groundwater pumped during excavation dewatering will be pre-treated on-Property using a temporary treatment system, and then discharged to City of Everett's wastewater treatment plant via their sanitary sewer, in accordance with a discharge authorization (DA). The temporary water pre-treatment system will consist of one or more weir tank(s) which will provide removal of settle-able solids. If pH of the contained water exceeds effluent criteria under the DA, pH adjustment will also be conducted in the tank, likely through addition of carbon dioxide (e.g. dry ice). Once effluent criteria are achieved, treated water will then be discharged into City sanitary sewer. Rates of treated water discharge to sewer will comply with the DA. Solids from this process may be tested and disposed or recycled as is appropriate.

5.3 CM Excavation and Handling

The means and methods for the CM removal activities will be established by the Contractor but will generally follow a structured and planned format, with contingency options for a variety of issues that may arise during the excavation. The Contractor will have contingency plans in place for the discovery of potential contamination, equipment delays, geotechnical

instability issues, equipment staging issues, traffic delays, and any staffing or training issues that may arise.

When the work is performed, the site will be divided into sections, as shown on **Kimberly-Clark Everett, CM Removal Plans, Sheet 7, Excavation Sequencing Areas**. This will allow for smaller sections of the site to be managed separately and to pinpoint any issues that arise and halt the process, if necessary, while allowing work to go on in other sections. The depth of excavation can be approximated by the depth of CM as depicted in **Kimberly-Clark Everett, CM Removal Plans, Sheet 6, Crushed Material Thickness Exhibit** that was developed based on soil boring data**.**

Depending on the time of year when excavation occurs, it is expected that some of the CM being excavated will be saturated since the depth to the groundwater table varies and is believed to be within 2 ft below grade (bgs) in places. Saturated CM will be drained directly back into the excavated area prior to loading. Care will be taken so that groundwater from the excavator bucket flows back into the excavated region and not to adjacent areas. Dewatering of the excavation per section 5.2 of this Plan of Operations will occur if needed to effectively remove CM from below the water table.

Trained equipment operators and dedicated observers will team up to process and remove the CM from each section. A laborer would be used as necessary to remove non-conforming items by hand if those items prevent the materials from being suitable for reuse or recycle. The team(s) will have the authority to remove any nonconforming items and place them in the appropriate dispositioning location. The team(s) will also have the authority to determine the need for additional sorting via a pick line or magnet if necessary.

Any material considered inappropriate for recycling will be characterized and adequately profiled prior to dispositioning. Some materials will be stockpiled on-site pending characterization or if the quantity on hand is insufficient to be considered enough for a full load for immediate disposal. If such materials can create leachate then they will be stored in solid bottom, clearly labeled containers or on an impervious surface (minimum 10 mil plastic sheeting) and covered. Determination of the appropriate management practices for the non-conforming materials will be made in conjunction with the Snohomish Health District as needed.

The team will load trucks or containers directly from the excavation or from stockpiles after which the materials will dispositioned per the Table 5.3.1 below.

All on site “traffic” will follow specific contractor developed on site haul routes and abide by all traffic safety designations so that worker safety is assured and no material spills occur while transporting on site.

Staff from Snohomish Health District (SHD) will be available (at least weekly) for on-site inspections or to advise on-site operational staff during the removal process. SHD staff will also provide consultation for regulatory compliance in the handling and removal of the CM and/or solid waste or contaminants that may be discovered if needed. SHD staff will have the ability to inspect and monitor the process and the authority or stop any part of it at any

time, if needed. SHD will also assist with material testing parameters, providing compliance measures around stockpiling conditions and other operations as the process progresses.

Table 5.3.1

Material	Status	Storage/Disposition Facility Type
Crushed Material	Recyclable	Loaded and hauled to appropriate facility (See Sec. 6)
Metals	Recyclable	Container / Local Metal Recycler
Wood – Untreated	Recyclable	Container or stored on liner / Local Wood Recycler
Wood – Treated	Waste	Dumpster or container / Sub Title D - Landfill Facility
Plastic	Waste	Dumpster or container / Sub Title D - Landfill Facility
Asphalt – Unmixed	Recyclable	Container or stored on liner/ Local Asphalt Recycler
Asphalt – Mixed	Waste	Dumpster or Container / Sub Title D - Landfill Facility
Mixed Wastes – Recyclable	Recyclable	Container / Material Recovery Facility (offsite)
Mixed Wastes - Non recyclable	Waste	Dumpster or Container / Sub Title D - Landfill Facility
Asbestos containing materials (ACM)	Waste	Sealable Container / ACM Permitted - Landfill Facility
Contaminated Soil or Soil in need of further testing	Waste (Potential)	Designated area or stored on liner / Sub Title D - Landfill Facility
Hazardous Waste	Waste	Container / Sub Title C - Landfill Facility via Licensed Hazardous Waste company.

5.4 Stockpile Management

Temporary short term stockpiling of CM or other materials in an on-Property location will not hinder completion of the CM removal activities. Materials stockpiled may be stored because of suspected contamination, or need for further testing or further sorting, or for optimal hauling logistics.

Stockpile locations will be located away from storm drain catch basins and outside of the 200 feet shoreline zone. KC will designate areas with an impervious surface for stockpiling. Materials suspected to be contaminated, organic wastes, and ferrous metals will be covered and contained in a manner to not create leachate. Snohomish Health District will assist as needed with regulatory requirements for stockpiles.

CM will be transported in a way so as to limit spillage between the removal excavation location and the stockpile location.

Any longer-term stockpiling that occurs on Property would comply with WAC 173-350-320, in consultation with the Snohomish Health District.

6 Material Management/Dispositioning

This section describes management and disposition locations for the CM excavated during the CM removal activities.

In accordance with K-C's corporate Environmental Sustainability Guidelines, Evergreen Recycling (Evergreen), a local waste reduction and recycling advisory firm, was commissioned to do an extensive investigation of local concrete recycling vendors and local landfill options. In its evaluation, Evergreen conducted site visits of more than 20 candidate facilities. Their due diligence work included general site assessments, permit status review, a process review on how the CM would be used or disposed of, documentation of any notices of violations on record and a general environmental compliance assessment for each facility, as well as documenting the facility's distance from the Property and their potential capacity limits. Given the extraordinary quantity of CM to be removed, involving more than 14,000 trips by truck with trailer, facilities beyond 50 miles from the Property were not evaluated, because longer transportation distances could become cost prohibitive and further exacerbate the environmental impacts (e.g. emissions, traffic) associated with implementing this Plan of Operations. After considering the recommendations made by Evergreen Recycling, K-C selected the vendors listed below for inclusion in the Plan of Operations, and several vendors were excluded from further consideration.

In an effort to reduce the traffic burden effects on neighboring streets, businesses and residences transportation routes from the Property to major arterials will be consolidated and

are depicted on **Kimberly-Clark Everett, CM Removal Plans, Sheet 5, Haul Route Exhibit.**

6.1 CM Reuse/Recycling

K-C is committed to the highest and best use for the removed CM, which is off-Property reuse or recycling, to minimize unwarranted consumption of landfill capacity. This approach is consistent with state and county waste reduction priorities.

At the time of preparation of this Plan of Operations, the recycler/resellers that passed K-C's evaluation process and have agreed to accept the material are listed below. However, nearly all of the recycler/resellers have conditioned their acceptance upon a concurrent approval being provided by the Snohomish County Health District through the acceptance of this Plan of Operations. Should additional reuse/recycle opportunities become available before the conclusion of this project they too will be evaluated for viability.

Riverside Sand & Gravel:
12225 Dubuque Rd, Snohomish, WA **(10 Miles from KC Property)**
425-334-5003
Contact: Andy Ryssel

Riverside Sand & Gravel operates an Aggregate sales facility and has a Sand and Gravel general permit from the Department of Ecology and currently conducts their concrete recycling operation under Exempt status. They have indicated that the CM would not require further processing as they currently sell comparable product. Volume limits for oversized materials could be restricted by their exempt status.

Thomco Construction:
13600 44th St. NE, Lake Stevens, WA **(11 Miles from KC Property**)
425-377-9130
Contact: Tyler Moe

Thomco's location is a large (45 acre) industrial operation that is well above the water table and away from neighbors. They operate their facility under a Sand and Gravel general permit from the Department of Ecology and currently conduct their concrete recycling operation under Exempt status. They have indicated they can receive approximately 20,000 tons per month and that the CM would not require further processing as they currently sell comparable product unless they chose to resize the CM for different market demand.

Menzel Lake Gravel:
7800 Menzel Lake Rd, Granite Falls, WA **(19 Miles from KC Property**)
360-691-0396
Contact: Rob Hild

Menzel Lake Gravel's location is a large industrial site that is well above the water table and far away from neighbors. They operate under a Sand and Gravel general permit from the Department of Ecology and currently conduct their concrete recycling operation under Exempt status. Their current concrete receiving and processing area is not large, but could be enlarged. They reportedly can receive approximately 2,500 yards per month, or 30,000 tons per year. They have indicated that the CM would not require further processing as they currently sell comparable product. Volume limits for oversized materials could be restricted by their exempt status.

East Valley Sand & Gravel:
Cemetery Road Arlington, WA **(19 Miles from KC Property**)
360-403-7520 5802
Contact: Penny Lee

East Valley Sand & Gravel's 20+ acre site sits just to the north of the Arlington Airport in an Industrial Park. They have a Sand and Gravel general permit from the Department of Ecology and currently conduct their concrete recycling operation under Exempt status. East Valley Sand Gravel currently sells comparable product. Volume limits for oversized materials could be restricted by their exempt status.

Lenz Enterprises:
5210 SR 532 Stanwood, WA **(23 Miles from KC Property)**
360-629-2933**.**
Contact: Edward Wheeler

Lenz Enterprises is a large (160 acre) facility with sand and gravel mining and a permitted composting facility. They operate their aggregates sales under a Sand and Gravel general permit from the Department of Ecology and conduct their concrete recycling operation under Exempt status. They operate their composting operations under permits issued by the Solid Waste Division of Department of Ecology. The site is well above the water table, and has a lined retention pond that allows for zero water discharge. Lenz is willing to apply for additional permit(s) as necessary to enable their facility to handle the total volume of CM. Volume limits for oversized materials could otherwise be restricted by their exempt status.

North Hill Resources:
651 North Hill Blvd Burlington, WA **(40 Miles from KC Property)**
360-757-1866
Contact: Heath Henderson

North Hill Resources currently sells crushed concrete, sand and gravel along with compost, mulch from commercial property in Skagit County. They operate under a Sand and Gravel general permit from the Department of Ecology and conduct their concrete recycling operation under Exempt status. They reportedly can accept a maximum of 5,000 tons per month to remain within the exemption.

6.2 Material Disposal

Although the highest and best use for the removed CM is reuse, K-C anticipates that, in order to meet project time commitments, at least some of the CM might have to be disposed of off-Property at local inert waste landfills. The CM consists of cured concrete, brick and masonry. Initial tests of the CM indicate it has less than 1% (0.65% on average) of incidental materials. Subsequent testing of the CM conducted for MTCA purposes showed that constituents detected were evenly distributed, indicating presence in the structural materials that became the CM, rather than introduction by means of chemical taint. Material going to landfill will still be subject to the dedicated observers during CM excavation as described in section 5.3 of this plan to spot and segregate for extraneous material that could have been contaminated, based on visual or olfactory indications.

Landfills that have agreed to receive the CM upon approval by the Snohomish Health District accepting this Plan of Operations include:

Cadman Sand and Gravel- Glenwood

6300 Glenwood Ave Everett, WA **(5 Miles from KC Property).**
425-348-6346
Contact: Larry Baker

Cadman sells sand and gravel, ready mix concrete, and aggregate from this location, in addition to operating a permitted inert waste landfill (quarry reclamation). The Inert Waste Landfill facility is permitted by the Snohomish County Health District and the Department of Natural Resources.

AAA Monroe Rock
15421 166th St SE Snohomish **(16 Miles from KC Property)**
360-805-1577
Contact: Zak Fiorito

AAA Monroe Rock is an inert waste landfill (quarry reclamation), currently permitted by Snohomish County Health District and the Department of Natural Resources and can receive concrete, brick, and other inert wastes. They sit well above the water table and are reclaiming a portion of their quarry with inert wastes.

7 Site Grading / Backfill

The CM removal excavation will be backfilled with geotechnically suitable granular materials (sand, gravel barrow or similar) imported from a known source of uncontaminated fill, and graded according to **Kimberly-Clark Everett, CM Removal Plans, Sheet 4, Site Conditions after Removal.**

For imported backfill, the Contractor must provide documentation of the fill source area land use and operational history, as well as representative analytical testing data for the fill material, to demonstrate it is not contaminated. If such documentation is not available from the supplier, representative sampling and chemical analyses for each source of imported backfill soil will include the following: 5 samples for up to 1,000 cubic yards of material, and 1 additional sample for every additional 5,000 cubic yards of material, with each sample analyzed for gasoline-range petroleum hydrocarbons (NWTPH-Gx method), diesel-/oil-range petroleum hydrocarbons (NWTPH-Dx method with silica gel cleanup), volatile organic compounds (EPA Method 8260), polycyclic aromatic hydrocarbons (PAHs) (EPA Method 8270), priority pollutant metals (EPA Methods 6000/7000), and PCBs (EPA Method 8082).

Depending on the condition of the excavation bottom prior to backfill, K-C may elect to place a layer of quarry spalls as a base beneath the granular backfill materials.

The excavation backfill will be placed in lifts not to exceed 12 inches in thickness, and will be compacted to match the undisturbed subsurface soils as measured by K-C's Engineer.

Any areas that were previously delineated for future Interim Action soil removal will not be backfilled until that work has been performed.

References

Aspect Consulting, LLC (Aspect), 2013, Work Plan for Remedial Investigation/Feasibility Study, Kimberly-Clark Worldwide Site Upland Area, Everett, Washington, November 22, 2013.

Aspect Consulting, LLC (Aspect), 2018, Work Plan for Second Interim Action, Kimberly-Clark Worldwide Site Upland Area, Everett, Washington, July 13, 2018.

FIGURES

Interim Action Areas

K-C Worldwide Site Upland Area
Everett, Washington

Aspect Consulting	JUL-2018	BY: SJG / RAP	FIGURE NO. 1
	PROJECT NO. 110207	REVISED BY: ---	

Basemap Layer Credits || Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

GIS Path: T:\projects_8\Kimberly-Clark\Env_Support_110207\Delivered\SEPA\02 Interim Action Areas.mxd || Coordinate System: NAD 1983 StatePlane Washington North FIPS 4601 Feet || Date Saved: 7/10/2018 || User: rpepin || Print Date: 7/10/2018

DRAWINGS

KIMBERLY-CLARK EVERETT
CRUSHED MATERIAL REMOVAL PLANS

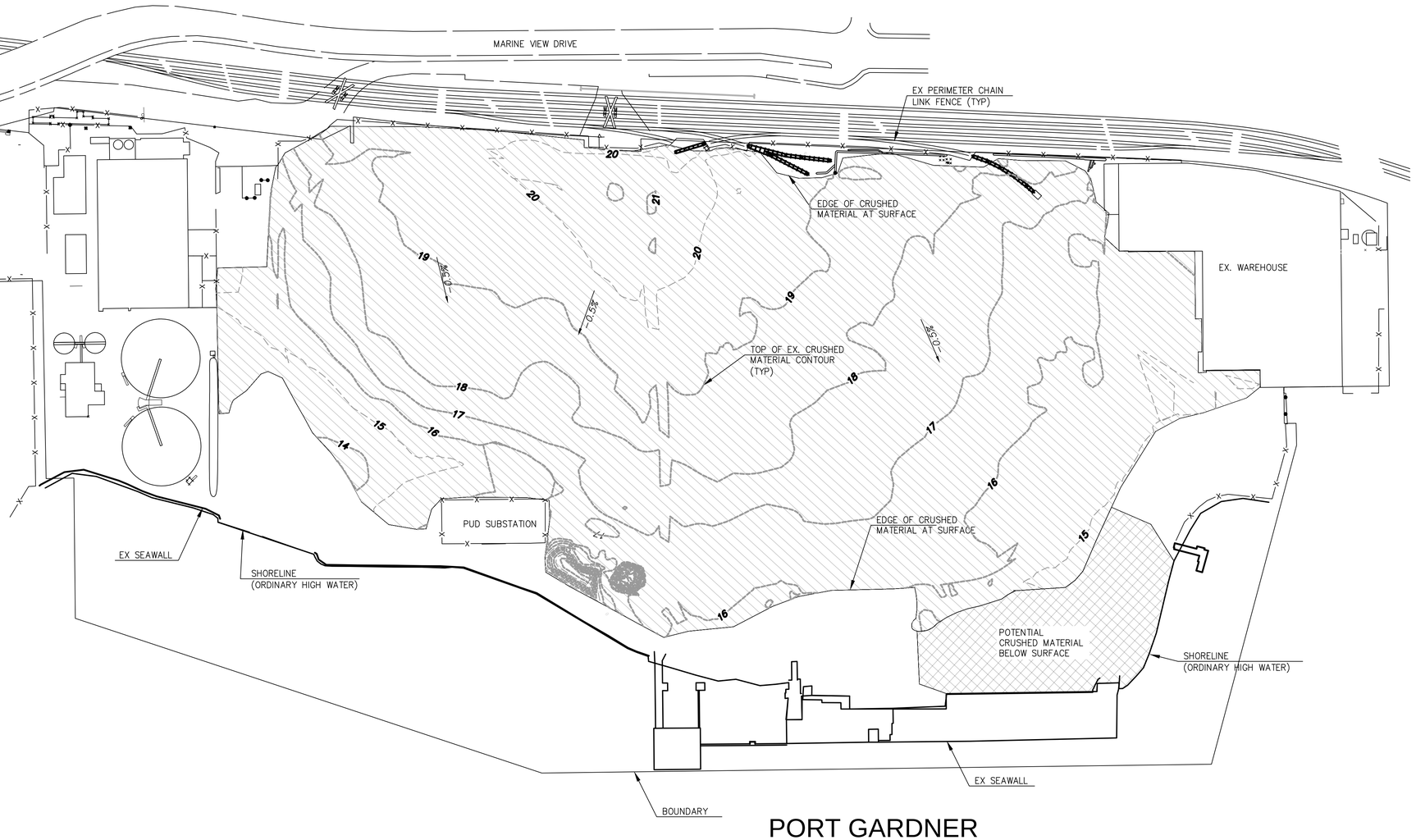
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

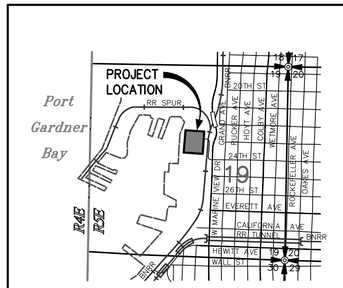
NORTH

0 60 120 240

SCALE: 1"=120'

CALL
2 BUSINESS DAYS
BEFORE YOU DIG
FOR UTILITY LOCATE
811





DEVELOPMENT DATA:

APPLICANT: KIMBERLY-CLARK WORLDWIDE INC
2600 FEDERAL AVE
EVERETT, WASHINGTON 98201
425.210.3284
ATTENTION: BRYAN LUST, PROJECT ENGINEER

ENGINEER/PLANNER
SURVEYOR: DAVID EVANS and ASSOCIATES, INC.
1620 W. MARINE VIEW DR. SUITE 200
EVERETT, WASHINGTON 98201
425.259.4099
ATTENTION: JOHN SMITH, P.E.

SITE DATA:

TAX PARCEL NUMBER: 29051900201500
29051900201300
29051900201100
29051900201000
29051900200900
29051900200200
29051900200100
00597761803000
00597761801000
00597761800600
00437461700200
00437461803901

PRESENT USE: VACANT

EXISTING ZONING: M-2 HEAVY MANUFACTURING

TOTAL AREA: 69.0 ACRES

SHEET INDEX:

SITE PLAN - EXISTING CONDITIONS

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
ecFG001KMBY00000010

SHEET NO.
1
OF 7

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A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

NORTH

0 60 120 240

SCALE: 1"=120'

CALL
2 BUSINESS DAYS
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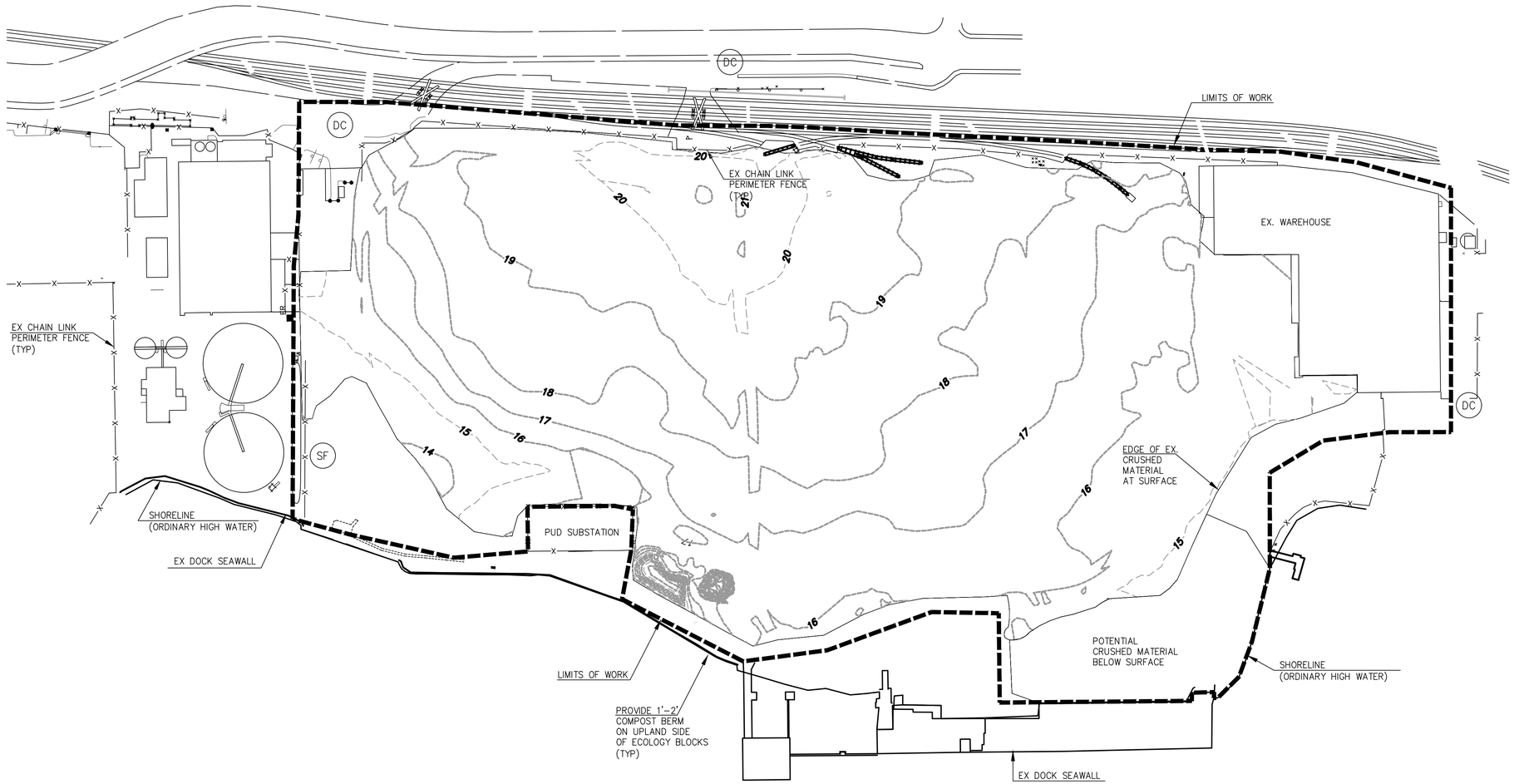
811



DEVELOPMENT DATA:

APPLICANT:	KIMBERLY-CLARK WORLDWIDE INC 2600 FEDERAL AVE. EVERETT, WASHINGTON 98201 425.210.3284 ATTENTION: BRYAN LUST, PROJECT ENGINEER
ENGINEER/PLANNER SURVEYOR:	DAVID EVANS and ASSOCIATES, INC. 1620 W. MARINE VIEW DR. SUITE 200 EVERETT, WASHINGTON 98201 425.259.4099 ATTENTION: JOHN SMITH, P.E.

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL MAINTAIN EXISTING PERIMETER FENCE AS WORK LIMITS.
2. SEDIMENT TRAPS TO BE REMOVED AS THE LAST STAGE OF CONSTRUCTION AFTER TRIBUTARY AREAS HAVE BEEN STABILIZED.
3. KIMBERLY-CLARK'S "GENERAL TERMS AND CONDITIONS" WILL APPLY TO ALL CONTRACTORS IN ALL SCOPES OF THE PROJECT.

EROSION CONTROL MONITORING PLAN

1. OBSERVE EROSION CONTROL MEASURES AT THE BEGINNING AND END OF EACH DAY. REPAIR AND OR REPLACE AS NECESSARY TO ASSURE PROPER FUNCTION.
2. OBSERVE COLLECTION FACILITIES DURING PERIODS OF HEAVY RAINFALL AND WET WEATHER CONDITIONS.
3. OBSERVE AND MONITOR STABILIZATION TECHNIQUES. MAKE REPAIRS AND/OR ALTERATIONS AS NECESSARY TO PREVENT EROSION.
4. COMPLY WITH ALL DOE AND COE REQUIREMENTS FOR DISCHARGE OF CONSTRUCTION STORMWATER.

CERTIFIED EROSION CONTROL SPECIALIST:

TO BE PROVIDED BY CONTRACTOR

STANDARD PRACTICE CODING SYSTEM:

CONTRACTOR TO INSTALL AND MAINTAIN ALL EROSION CONTROL BMP'S AS SHOWN ON THIS PLAN IN ACCORDANCE WITH DEPARTMENT OF ECOLOGY STORMWATER POLLUTION PREVENTION REQUIREMENTS SUMMARIZED ON SHEET C5. IF BMP INSTALLATION AND MAINTENANCE IS INADEQUATE TO MEET THESE REQUIREMENTS CONTRACTOR TO PROVIDE ADDITIONAL BMP'S AT NO ADDITIONAL COST TO OWNER.

CODE	BMPs
CE	CONSTRUCTION ENTRANCE (D.O.E. BMP C105)
CPC	CLEAR PLASTIC COVERING (D.O.E. BMP C123)
CS	COMPOST SOCK (WSDOT STD PLAN I-30.40-00)
DC	DUST CONTROL (D.O.E. BMP C140)
IP	CATCH BASIN/INLET SEDIMENT PROTECTION (WSDOT STD PLAN I-40.20-00)
MU	MULCH AND/OR MATTING (D.O.E. BMP C121)
PS	PERMANENT SEEDING (D.O.E. BMP C120)
SF	SILT FENCE (D.O.E. BMP C233)
WW	WHEEL WASH (D.O.E. BMP C106)

TESC / SWPPP PLAN

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS:	APPD.

DATE: MAY, 2018
DESIGN: JNS
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REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
ecFG002KMBY00000010

SHEET NO.
2
OF 7

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STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

THIS STORMWATER POLLUTION PREVENTION PLAN IS PROVIDED IN ACCORDANCE WITH THE TERMS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR CONSTRUCTION ACTIVITIES FOR THIS PROJECT. THE CONTRACTOR IS ADVISED THAT THE PROJECT AREA DRAINS TO WETLANDS AND/OR STATE WATERS AND THAT THE CONTRACTOR IS RESPONSIBLE TO PROTECT THE RECEIVING WATERS FROM DELETERIOUS EFFECTS OF CONSTRUCTION.

THE CONTRACTOR IS REQUIRED TO HAVE A COPY OF THE NPDES PERMIT AS WELL AS THE SWPPP ON SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE EROSION CONTROL MEASURES SHOWN OR DESCRIBED IN THE CONTRACT DOCUMENTS AND ANY ADDITIONAL MEASURES THAT MAY BE REQUIRED BY THE CONTRACTORS MEANS AND METHODS OF CONSTRUCTION AS NEEDED TO CONTROL EROSION AND SEDIMENT AT THE CONSTRUCTION SITE AND TO PREVENT VIOLATION OF SURFACE WATER QUALITY, GROUND WATER QUALITY, OR SEDIMENT MANAGEMENT STANDARDS. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED EARTH IS STABILIZED IN FINISH GRADES.

THE FOLLOWING DESCRIBES HOW THE CONSTRUCTION SWPPP ADDRESSEES EACH OF THE 12 REQUIRED ELEMENTS. REFER TO THESE PLANS FOR DRAWINGS OF THE PROJECT, VICINITY MAP, SITE MAP, CONVEYANCE SYSTEMS, EROSION AND SEDIMENT CONTROL MEASURES, AND EROSION AND SEDIMENT CONTROL DETAILS.

ELEMENT #1: PRESERVE VEGETATION/MARK CLEARING LIMITS
1. PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES (INCLUDING CLEARING AND GRADING) CLEARLY MARK ALL CLEARING LIMITS AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA AS SHOWN ON THE DRAWINGS.
2. SILT FENCE, GEOTEXTILE ENCASED BARRIERS, CONSTRUCTION FENCE, ORANGE PLASTIC FENCE, OR OTHER APPROVED MEASURES MAY BE USED TO MARK THE CLEARING LIMITS AT THE CONTRACTOR'S OPTION.
3. THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM DEGREE PRACTICABLE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C103: HIGH VISIBILITY PLASTIC OR METAL FENCE

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS
1. CONSTRUCTION VEHICLE ACCESS AND EXIT SHALL BE LIMITED TO ONE ROUTE. REFER TO SHEET 1 OF THESE PLANS FOR THE CONSTRUCTION ENTRANCE LOCATION. ALL ACCESS/EXIT POINTS SHALL BE STABILIZED WITH QUARRY SPALLS, CRUSHED ROCK OR OTHER EQUIVALENT BMP, TO MINIMIZE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS.
2. IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT EFFECTIVE IN PREVENTING SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADS, WHEEL WASH OR TIRE BATHS SHALL BE LOCATED ON SITE.
3. IF SEDIMENT IS TRACKED OFF SITE, PUBLIC ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY, OR MORE FREQUENTLY DURING WET WEATHER. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR PICKUP SWEEPING AND SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
4. STREET WASHING IS ALLOWED ONLY AFTER SEDIMENT IS REMOVED AS DESCRIBED ABOVE. STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ON SITE OR OTHERWISE BE PREVENTED FROM FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C105: STABILIZED CONSTRUCTION ENTRANCE
BMP C106: WHEEL WASH
BMP C107: CONSTRUCTION ROAD/PARKING AREA STABILIZATION

ELEMENT #3: CONTROL FLOW RATES
1. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VELOCITY AND PEAK VOLUMETRIC FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C240: SEDIMENT TRAP

ELEMENT #4: INSTALL SEDIMENT CONTROLS
1. THE DUFF LAYER, NATIVE SOIL, AND NATURAL VEGETATION SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICABLE.
2. SEDIMENT CONTROL BMPs SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING. THESE BMPs SHALL BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.
3. PRIOR TO LEAVING THE CONSTRUCTION SITE, STORMWATER RUNOFF FROM DISTURBED AREAS SHALL PASS THROUGH AN APPROPRIATE SEDIMENT REMOVAL BMP. RUNOFF FROM FULL STABILIZED AREAS MAY BE DISCHARGED WITHOUT A SEDIMENT REMOVAL BMP, BUT MUST MEET THE FLOW CONTROL PERFORMANCE STANDARD OF ELEMENT #3.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C150: MATERIALS ON HAND
BMP C233: SILT FENCE
BMP C220: STORM DRAIN INLET PROTECTION
BMP C240: SEDIMENT TRAP

ELEMENT #5: STABILIZE SOILS
1. EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF EFFECTIVE BMPs THAT PROTECT THE SOIL FORM EROSIVE FORCES OF RAINDROPS. FLOWING WATER, AND WIND.
2. TO PREVENT EROSION, NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN THE TIME PERIODS SET FORTH BELOW:
DURING THE WET SEASON (OCTOBER 1 – APRIL 30): 2 DAYS
DURING THE DRY SEASON (MAY 1 – SEPT. 30): 7 DAYS
THIS STABILIZATION REQUIREMENT APPLIES TO ALL SOILS ON SITE, WHETHER AT FINAL GRADE OR NOT. THESE TIMES MAY BE ADJUSTED BY THE LOCAL PERMITTING AUTHORITY IF IT CAN BE SHOWN THAT SITE CONDITIONS OR THE AVERAGE TIME BETWEEN STORM EVENTS JUSTIFIES A DIFFERENT STANDARD.
3. SOILS SHALL BE STABILIZED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST.
4. SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHERE POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATERWAYS, AND DRAINAGE CHANNELS.
5. APPLICABLE BMPs INCLUDE, BUT ARE NOT LIMITED TO: TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED AND DUST CONTROL. SELECT SOIL STABILIZATION MEASURES SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, AND THE POTENTIAL WATER QUALITY IMPACTS.
6. REMOVE ALL TESC MEASURES AS SOON AS PRACTICAL AFTER ESTABLISHMENT OF UNIFORM GRASS GROWTH OR INSTALLATION OF OTHER PERMANENT STABILIZATION MEASURES. REPAIR ANY DAMAGE TO STABILIZED SURFACES AFTER REMOVAL OF TESC MEASURES.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C107: CONSTRUCTION ROAD/PARKING AREA STABILIZATION
BMP C120: TEMPORARY AND PERMANENT SEEDING
BMP C121: MULCHING
BMP C123: PLASTIC COVERING
BMP C140: DUST CONTROL
BMP C150: MATERIALS ON HAND

ELEMENT #6: PROTECT SLOPES
1. DESIGN, CONSTRUCT, AND PHASE CUT AND FILL SLOPES IN A MANNER THAT WILL MINIMIZE EROSION. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, REDUCING CONTINUOUS LENGTH OF SLOPE WITH TERRACING AND DIVERSIONS, REDUCING SLOPE STEEPNESS, AND ROUGHENING SLOPE SURFACES (e.g., TRACK WALKING).
2. OFF–SITE STORMWATER RUN–ON OR GROUNDWATER SHALL BE DIVERTED AWAY FROM SLOPES AND DISTURBED AREAS WITH INTERCEPTOR DIKES, PIPES, AND/OR SWALES. OFF–SITE STORMWATER SHOULD BE MANAGED SEPARATELY FROM STORMWATER GENERATED ON THE SITE.
3. DO NOT CLEAR AND GRUB SLOPES GREATER THAN 4 (HORIZONTAL):1 (VERTICAL) UNLESS FURTHER WORK RESULTING IN STABILIZATION OF THE SLOPES TO BE CLEARED AND GRUBBED IS SCHEDULED.
4. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS.
5. CHECK DAMS SHALL BE PLACED AT REGULAR INTERVALS WITHIN CONSTRUCTED CHANNELS THAT ARE CUT DOWN A SLOPE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C120: TEMPORARY AND PERMANENT SEEDING
BMP C150: MATERIALS ON HAND

ELEMENT #7: PROTECT DRAIN INLETS
1. ALL STORM DRAIN INLETS OPERABLE DURING CONSTRUCTION AND ALL INLETS WITHIN 200' DOWNSTREAM OF THE PROJECT SITE SHALL BE PROTECTED WITH CATCH BASIN FILTERS SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT. CATCH BASIN FILTERS IN THE ROADWAY WILL BE OIL/SEDIMENT FILTERS AND CATCH BASIN FILTERS OUTSIDE OF THE ROADWAY WILL BE SEDIMENT FILTERS.
2. APPROACH ROADS SHALL BE KEPT CLEAN. SEDIMENT AND STREET WASH WATER SHALL NOT BE ALLOWED TO ENTER STORM DRAINS WITHOUT PRIOR AND ADEQUATE TREATMENT.
3. INLET PROTECTION DEVICES SHOULD BE CLEANED OR REMOVED AND REPLACED WHEN SEDIMENT HAS FILLED ONE–THIRD OF THE AVAILABLE STORAGE (OR WHEN FILLED WITH SIX–INCHES OF SEDIMENT).

BMPs TO BE USED:
BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT #8: STABILIZE CHANNELS AND OUTLETS
1. ALL TEMPORARY ON–SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED PEAK 10 MINUTE VELOCITY OF FLOW FROM A TYPE 1A, 10–YR, 24–HR FREQUENCY STORM FOR THE DEVELOPED CONDITION. ALTERNATIVELY, THE 10–YR, 1–HR FLOW RATE INDICATED BY AN APPROVED CONTINUOUS RUNOFF MODEL, INCREASED BY A FACTOR OF 1.6, MAY BE USED.
2. STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES, AND DOWNSTREAM REACHES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C209: OUTLET PROTECTION

ELEMENT #9: CONTROL POLLUTANTS
1. ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.
2. COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND OTHER MATERIALS THAT HAVE THE POTENTIAL TO POSE A THREAT TO HUMAN HEALTH OR THE ENVIRONMENT. ON–SITE FUELING TANKS SHALL INCLUDE SECONDARY CONTAINMENT.
3. MAINTENANCE, FUELING, AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES SHALL BE CONDUCTED USING SPILL PREVENTION AND CONTROL MEASURES. CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY SPILL INCIDENT.
4. WHEEL WASH OR TIRE BATH WASTEWATER SHALL BE DISCHARGED TO A SEPARATE ON–SITE TREATMENT SYSTEM OR TO THE SANITARY SEWER WITH LOCAL SEWER DISTRICT APPROVAL.
5. APPLICATION OF FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURERS' LABEL REQUIREMENTS FOR APPLICATION RATES AND PROCEDURES SHALL BE FOLLOWED.
6. BMPs SHALL BE USED TO PREVENT OR TREAT CONTAMINATION OF STORMWATER RUNOFF BY pH MODIFYING SOURCES. THESE SOURCES INCLUDE, BUT ARE NOT LIMITED TO: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, AND CONCRETE PUMPING AND MIXER WASHOUT WATERS. PERMITTEES SHALL ADJUST THE pH OF STORMWATER IF NECESSARY TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS.
7. PERMITTEES SHALL OBTAIN WRITTEN APPROVAL FROM ECOLOGY PRIOR TO USING CHEMICAL TREATMENT, OTHER THAN CARBON DIOXIDE OR DRY ICE TO ADJUST pH.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C151: CONCRETE HANDLING
BMP C152: SAWCUTTING AND SURFACING POLLUTION PREVENTION
BMP C153: MATERIAL DELIVERY, STORAGE & CONTAINMENT

ELEMENT #10: CONTROL DEWATERING
1. FOUNDATION, VAULT, AND TRENCH DE–WATERING WATER, WHICH HAVE SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, SHALL BE DISCHARGED INTO A CONTROLLED CONVEYANCE SYSTEM PRIOR TO DISCHARGE TO A SEDIMENT TRAP OR SEDIMENT POND.

2. CLEAN, NON–TURBID DE–WATERING WATER, SUCH AS WELL–POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO, OR DIRECTLY INTO SURFACE WATERS OF THE STATE, AS SPECIFIED IN ELEMENT #8, PROVIDED THE DE–WATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. CLEAN DE–WATERING WATER SHOULD NOT BE ROUTED THROUGH STORMWATER SEDIMENT PONDS.

3. OTHER DE–WATERING DISPOSAL OPTIONS MAY INCLUDE:
a) INFILTRATION.
b) TRANSPORT OFF SITE IN A VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS.
c) ECOLOGY APPROVED ON–SITE CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES.
d) SANITARY SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, IF THERE IS NO OTHER OPTION.
e) USE OF A SEDIMENTATION BAG (DIRTBAG OR APPROVED EQUAL) WITH OUTFALL TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DE–WATERING.

4. HIGHLY TURBID CONTAMINATED DEWATERING WATER FROM CONSTRUCTION EQUIPMENT OPERATION, CLAMSHELL DIGGING, CONCRETE TREMIE POUR, OR WORK INSIDE A COFFERDAM SHALL BE HANDLED SEPARATELY FROM STORMWATER.

ELEMENT #11: MAINTAIN BMPs
1. INSPECT EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. MAKE NECESSARY REPAIRS AND MAINTENANCE TO ENSURE CONTINUED PERFORMANCE OF EROSION AND SEDIMENT CONTROLS.

2. WHEN SEDIMENT ACCUMULATION IN SEDIMENTATION STRUCTURES, OTHER THAN INLET PROTECTION DEVICES, HAS REACHED A POINT ONE–THIRD DEPTH OF SEDIMENT STRUCTURE OR DEVICE, OR IF FLOW THROUGH THE DEVICE IS REDUCED BY MORE THAN ONE–THIRD CAPACITY, THE CONTRACTOR SHALL REMOVE AND REPLACE DISPOSABLE DEVICES OR CLEAN AND DISPOSE OF SEDIMENT.

3. TEMPORARY EROSION AND SEDIMENT CONTROL BMPs SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOILS SHALL BE PERMANENTLY STABILIZED.

ELEMENT #12: MANAGE THE PROJECT
1. PHASING OF CONSTRUCTION:
a) DEVELOPMENT PROJECTS SHALL BE PHASED WHERE FEASIBLE IN ORDER TO PREVENT, TO THE MAXIMUM EXTENT PRACTICABLE, THE TRANSPORT OF SEDIMENT FROM THE DEVELOPMENT SITE DURING CONSTRUCTION. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION SHALL BE AN INTEGRAL PART OF THE CLEARING ACTIVITIES FOR ANY PHASE.
b) CLEARING AND GRADING ACTIVITIES FOR DEVELOPMENTS SHALL BE PERMITTED ONLY IF CONDUCTED PURSUANT TO AN APPROVED SITE DEVELOPMENT PLAN (e.g., SUBDIVISION APPROVAL) THAT ESTABLISHES APPROVED AREAS OF CLEARING, GRADING, CUTTING AND FILLING. WHEN ESTABLISHING THESE PERMITTED CLEARING AND GRADING AREAS, CONSIDERATION SHOULD BE GIVEN TO MINIMIZING REMOVAL OF EXISTING TREES AND MINIMIZING DISTURBANCE AND COMPACTION OF NATIVE SOILS EXCEPT AS NEEDED FOR BUILDING PURPOSES. THESE PERMITTED CLEARING AND GRADING AREAS AND ANY OTHER AREAS REQUIRED TO PRESERVE CRITICAL OR SENSITIVE AREAS, BUFFERS, NATIVE GROWTH PROTECTION EASEMENTS, OR TREE RETENTION AREAS AS MAY BE REQUIRED BY LOCAL JURISDICTIONS, SHALL BE DELINEATED ON THE SITE PLANS AND THE DEVELOPMENT SITE.

2. SEASONAL WORK LIMITATIONS:
FROM OCTOBER 1 THROUGH APRIL 30, CLEARING, GRADING, AND OTHER SOIL DISTURBING ACTIVITIES SHALL ONLY BE PERMITTED IF SHOWN TO THE SATISFACTION OF THE LOCAL PERMITTING AUTHORITY THAT THE TRANSPORT OF SEDIMENT FROM THE CONSTRUCTION SITE TO RECEIVING WATERS WILL BE PREVENTED THROUGH A COMBINATION OF THE FOLLOWING:
a) SITE CONDITIONS INCLUDING EXISTING VEGETATIVE COVERAGE, SLOPE, SOIL TYPE, AND PROXIMITY TO RECEIVING WATERS; AND
b) LIMITATIONS ON ACTIVITIES AND THE EXTEND OF DISTURBED AREAS; AND
c) PROPOSED EROSION AND SEDIMENT CONTROL MEASURES.

BASED ON THE INFORMATION PROVIDED AND LOCAL WEATHER CONDITIONS, THE LOCAL PERMITTING AUTHORITY MAY EXPAND OR RESTRICT THE SEASONAL LIMITATION ON SITE DISTURBANCE. THE LOCAL PERMITTING AUTHORITY SHALL TAKE ENFORCEMENT ACTION – SUCH AS NOTICE OF VIOLATION, ADMINISTRATIVE ORDER, PENALTY, OR STOP–WORK ORDER UNDER THE FOLLOWING CIRCUMSTANCES:
– IF, DURING THE COURSE OF ANY CONSTRUCTION ACTIVITY OR SOIL DISTURBANCE DURING THE SEASONAL LIMITATION PERIOD, SEDIMENT LEAVES THE CONSTRUCTION SITE CAUSING A VIOLATION OF THE SURFACE WATER QUALITY STANDARD; OR
– IF CLEARING AND GRADING LIMITS OR EROSION AND SEDIMENT CONTROLS MEASURES SHOWN IN THE APPROVED PLAN ARE NOT MAINTAINED.

THE FOLLOWING ACTIVITIES ARE EXEMPT FROM THE SEASONAL CLEARING AND GRADING LIMITATIONS:
a) ROUTINE MAINTENANCE AND NECESSARY REPAIR OF EROSION AND SEDIMENT CONTROL BMPs;
b) ROUTINE MAINTENANCE OF PUBLIC FACILITIES OR EXISTING UTILITY STRUCTURES THAT DO NOT EXPOSE THE SOIL OR RESULT IN THE REMOVAL OF THE VEGETATIVE COVER TO SOIL; AND
c) ACTIVITIES WHERE THERE IS ONE HUNDRED PERCENT INFILTRATION OF SURFACE WATER RUNOFF WITHIN THE SITE IN APPROVED AND INSTALLED EROSION AND SEDIMENT CONTROL FACILITIES.

3. COORDINATE WITH UTILITIES AND OTHER CONTRACTORS
THE PRIMARY PROJECT PROPONENT SHALL EVALUATE, WITH INPUT FROM UTILITIES AND OTHER CONTRACTORS, THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE ENTIRE PROJECT, INCLUDING THE UTILITIES, WHEN PREPARING THE CONSTRUCTION SWPPP.

4. INSPECTION AND MONITORING:
a) A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL SHALL BE IDENTIFIED AT THE PRE–CONSTRUCTION MEETING AND SHALL BE ON–SITE OR ON–CALL AT ALL TIMES. EMERGENCY CONTACT INFORMATION SHALL BE KEPT ON–SITE. CERTIFICATION MAY BE THROUGH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM OFFERED BY WSDOT, ASSOCIATED GENERAL CONTRACTORS OF WASHINGTON – EDUCATION FOUNDATION, OR ANY EQUIVALENT LOCAL OR NATIONAL CERTIFICATION AND/OR TRAINING PROGRAM.
b) IF INSPECTION AND/OR WATER MONITORING OF SITE RUNOFF REVEALS THAT THE BMPs IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, THE CONTRACTOR SHALL IMMEDIATELY ADD BMPs TO THE SWPPP AS NECESSARY.

4. THE CONSTRUCTION SWPPP SHALL BE RETAINED ON–SITE. THE CONTRACTOR'S TESC RECORD OF RAINFALL, TESC MEASURES, AND INSPECTION SHALL BECOME PART OF THE SWPPP. THE CONSTRUCTION SWPPP SHALL BE MODIFIED BY THE CONTRACTOR'S TESC RECORD WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

NPDES PERMIT REQUIREMENTS

SITE LOG BOOK
A SITE LOG BOOK SHALL CONTAIN A RECORD OF THE IMPLEMENTATION OF THE SWPPP AND OTHER PERMIT REQUIREMENTS INCLUDING THE INSTALLATION AND MAINTENANCE OF BMPs, SITE INSPECTIONS AND STORMWATER MONITORING.

SITE INSPECTIONS
SITE INSPECTIONS SHALL INCLUDE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, ALL BMPs, AND ALL STORMWATER DISCHARGE POINTS. STORMWATER SHALL BE VISUALLY EXAMINED FOR THE PRESENCE OF SUSPENDED SEDIMENT, TURBIDITY, DISCOLORATION, AND OIL SHEEN. INSPECTORS SHALL EVALUATE THE EFFECTIVENESS OF BMPs AND DETERMINE IF IT IS NECESSARY TO INSTALL, MAINTAIN, OR REPAIR BMPs TO IMPROVE THE QUALITY OF STORMWATER DISCHARGES.

BASED ON THE RESULTS OF THE INSPECTION, THE CONTRACTOR SHALL CORRECT THE PROBLEMS IDENTIFIED AS FOLLOWS:
A. MAKE APPROPRIATE CORRECTION WITHIN 7 DAYS OF TEH INSPECTION; AND
B. FULLY IMPLEMENT AND MAINTAIN APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPs AS SOON AS POSSIBLE, BUT NO LATER THAN 10 DAYS OF TEH INSPECTION; AND
C. DOCUMENT BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK.

SITE INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS OF ANY DISCHARGE FROM THE SITE. THE INSPECTION FREQUENCY FOR TEMPORARILY STABILIZED, INACTIVE SITE MAY BE REDUCED TO ONCE EVERY CALENDAR MONTH.

THE INSPECTOR SHALL SUMMARIZE THE RESULTS OF EACH INSPECTION IN AN INSPECTION REPORT OR CHECKLIST AND BE ENTERED INTO, OR ATTACHED TO, THE SITE LOG BOOK. AT A MINIMUM, EACH INSPECTION REPORT OR CHECKLIST SHALL INCLUDE:
a. INSPECTION DATE AND TIME.
b. WEATHER INFORMATION, GENERAL CONDITIONS DURING INSPECTION AND APPROXIMATE AMOUNT OF PRECIPITATION SINCE THE LAST INSPECTION, AND WITHIN THE LAST 24 HOURS.
c. A SUMMARY OR LIST OF ALL BMPs WHICH HAVE BEEN IMPLEMENTED, INCLUDING OBSERVATIONS OF ALL EROSION/SEDIMENT CONTROL STRUCTURES OR PRACTICES.
d. THE FOLLOWING SHALL BE NOTED:
 i. LOCATIONS OF BMPs INSPECTED,
 ii. LOCATIONS OF BMPs THAT NEED MAINTENANCE,
 iii. THE REASON MAINTENANCE IS NEEDED,
 iv. LOCATIONS OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR INTENDED, AND
 v. LOCATIONS WHERE ADDITIONAL OR DIFFERENT BMPs ARE NEEDED, AND THE REASON(S) WHY.
e. A DESCRIPTION OF STORMWATER DISCHARGED FROM THE SITE. THE INSPECTOR SHALL NOTE THE PRESENCE OF SUSPENDED SEDIMENT, TURBID WATER, DISCOLORATION, AND/OR OIL SHEEN, AS APPLICABLE.
f. ANY WATER QUALITY MONITORING PERFORMED DURING INSPECTION.
g. GENERAL COMMENTS AND NOTES, INCLUDING A BRIEF DESCRIPTION OF ANY BMP REPAIRS, MAINTENANCE OR INSTALLATION MADE AS A RESULT OF THE INSPECTION.
h.
i. NAME, TITLE, AND SIGNATURE OF TEH PERSON CONDUCTING SITE INSPECTION; AND THE FOLLOWING STATEMENT: "I CERTIFY THAT THIS REPORT IS TRUE, ACCURATE, AND COMPLETE, TO THE BEST OF MY KNOWLEDGE AND BELIEF".

C. TURBIDITY/TRANSPARENCY SAMPLING REQUIREMENTS

1. SAMPLING METHODS/EFFECTIVE DATES
 a. BEGINNING OCTOBER 1, 2006, IF CONSTRUCTION ACTIVITY WILL INVOLVE THE DISTURBANCE OF 5 ACRES OR MORE, THE PERMITTEE SHALL CONDUCT TURBIDITY SAMPLING PER CONDITION S4.C.

2. SAMPLING FREQUENCY
 a. SAMPLING SHALL BE CONDUCTED AT LEAST ONCE EVERY CALENDAR WEEK, WHEN THERE IS A DISCHARGE OF STORMWATER (OR AUTHORIZED NON–STORMWATER) FROM THE SITE. SAMPLES SHALL BE REPRESENTATIVE OF THE FLOW AND CHARACTERISTICS OF THE DISCHARGE.
 b. WHEN THERE IS NO DISCHARGE DURING A CALENDAR WEEK, SAMPLING IS NOT REQUIRED.
 c. SAMPLING IS NOT REQUIRED OUTSIDE OF NORMAL WORKING HOURS OR DURING UNSAFE CONDITIONS. IF A PERMITTEE IS UNABLE TO SAMPLE DURING A MONITORING PERIOD, THE DISCHARGE MONITORING REPORT (DMR) SHALL INCLUDE A BRIEF EXPLANATION.

3. SAMPLING LOCATIONS
 a. SAMPLING IS REQUIRED AT ALL DISCHARGE POINTS WHERE STORMWATER (OR AUTHORIZED NON–STORMWATER) IS DISCHARGED OFF–SITE.
 b. ALL SAMPLING POINT(S) SHALL BE IDENTIFIED ON THE SWPPP SITE MAP AND BE CLEARLY MARKED IN THE FIELD WITH A FLAG, TAPE, STAKE OR OTHER VISIBLE MARKER.

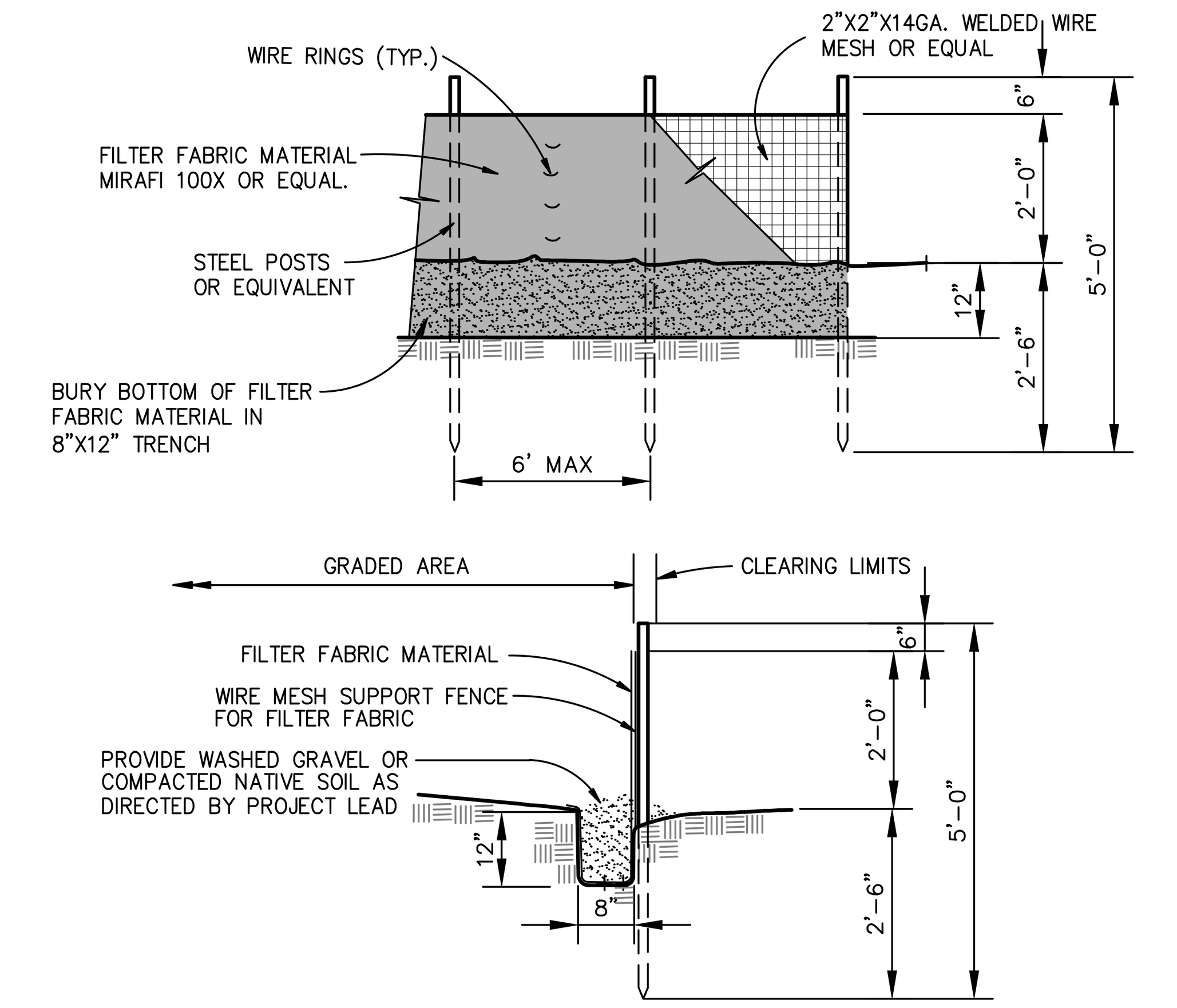
4. SAMPLING AND ANALYSIS METHODS
 a. TURBIDITY ANALYSIS SHALL BE PERFORMED WITH A CALIBRATED TURBIDITY METER (TURBIDIMETER), EITHER ON–SITE OR AT AN ACCREDITED LAB. THE RESULTS SHALL BE RECORDED IN THE SITE LOG BOOK IN NEPHELOMETRIC TURBIDITY UNITS (NTU).
 b. TRANSPARENCY ANALYSIS SHALL BE PERFORMED ON–SITE WITH A 1 ¾ INCH DIAMETER, 60 CENTIMETER (CM) LONG TRANSPARENCY TUBE. THE RESULTS SHALL BE RECORDED IN THE SITE LOG BOOK IN CENTIMETERS (CM). TRANSPARENCY TUBES ARE AVAILABLE FROM: http://watermonitoringequip.com/pages/stream.html

PARAMETER	UNITS	ANALYTICAL METHOD	SAMPLING FREQUENCY	BENCHMARK VALUE
TURBIDITY	NTU	SM2130 OR EPA 180.1	WEEKLY, IF DISCHARGING	25 NTU
TRANSPARENCY	CM	MANUFACTURER INSTRUCTIONS, OR ECOLOGY GUIDANCE	WEEKLY, IF DISCHARGING	31 CM

5. TURBIDITY/TRANSPARENCY BENCHMARK VALUES
THE BENCHMARK VALUE FOR TURBIDITY IS 25 NTU (NEPHELOMETRIC TURBIDITY UNITS); AND THE BENCHMARK VALUE FOR TRANSPARENCY IS 31 CM.
 a. TURBIDITY 26 – 249 NTU, OR TRANSPARENCY 30–7 CM:
 IF DISCHARGE TURBIDITY IS GREATER THAN 25 NTU, BUT LESS THAN 250 NTU; OR IF DISCHARGE TRANSPARENCY IS LESS THAN 31 CM, BUT GREATER THAN 6 CM, THE CESCL SHALL:
 i. REVIEW THE SWPPP FOR COMPLIANCE WITH CONDITION S9 AND MAKE APPROPRIATE REVISIONS WITHIN 7 DAYS OF THE DISCHARGE THAT EXCEEDED THE BENCHMARK; AND
 II. FULLY IMPLEMENT AND MAINTAIN APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPs AS SOON AS POSSIBLE, BUT WITHIN 10 DAYS OF THE DISCHARGE THAT EXCEEDED THE BENCHMARK; AND
 III. DOCUMENT BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK.

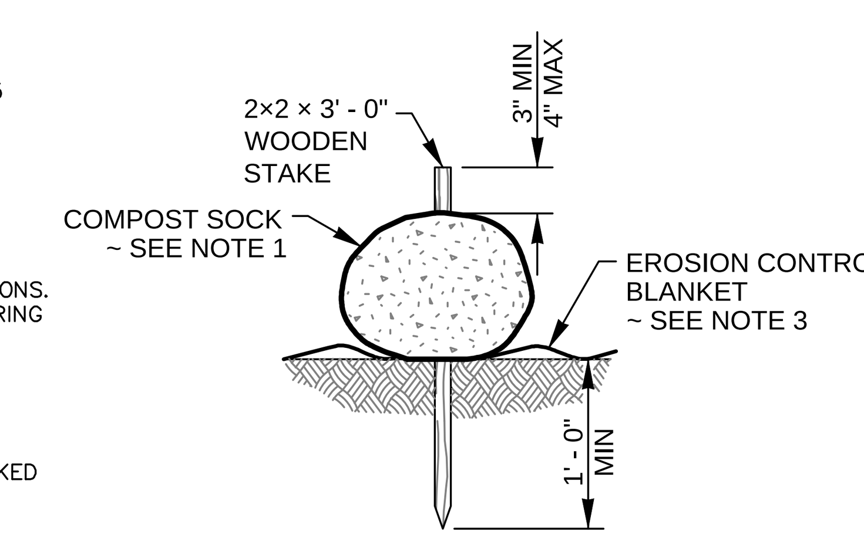
 b. TURBIDITY 250 NTU OR GREATER, OR TRANSPARENCY 6 CM OR LESS:
 IF DISCHARGE IS GREATER THAN OR EQUAL TO 250 NTU; OR IF DISCHARGE TRANSPARENCY IS LESS THAN OR EQUAL TO 6 CM, THE CESCL SHALL:
 i. NOTIFY ECOLOGY BY PHONE IN ACCORDANCE WITH CONDITION S5.A.; AND
 ii. REVIEW THE SWPPP FOR COMPLIANCE WITH CONDITION S9 AND MAKE APPROPRIATE REVISIONS WITHIN 7 DAYS OF THE DISCHARGE THAT EXCEEDED THE BENCHMARK; AND
 iii. FULLY IMPLEMENT AND MAINTAIN APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPs AS SOON AS POSSIBLE, BUT WITHIN 10 DAYS OF DISCHARGE THAT EXCEEDED THE BENCHMARK;
 iv. DOCUMENT BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK; AND
 v. CONTINUE TO SAMPLE DISCHARGES DAILY UNTIL:
  1. TURBIDITY IS 25 NTU (OR LOWER); OR
  2. TRANSPARENCY IS 31 CM OR (OR GREATER); OR
  3. THE CESCL HAS DEMONSTRATED COMPLIANCE WITH THE WATER QUALITY STANDARD FOR TURBIDITY:
   a .NO MORE THAN 5 NTU OVER BACKGROUND TURBIDITY, IF BACKGROUND IS LESS THAN 50 NTU, OR
   b.NO MORE THAN 10 % OVER BACKGROUND TURBIDITY, IF BACKGROUND IS 50 NTU OR GREATER; OR
  4. THE DISCHARGE STOPS OR IS ELIMINATED

NOTE: ALL SECTIONS REFERENCED IN THE SAMPLING REQUIREMENTS CAN BE LOCATED IN THE NPDES PERMIT.



DETAIL - FILTER FABRIC SILT FENCE

NOT TO SCALE



NOTES

1. Compost Sock shall be in accordance with Standard Specification 9-14.5(6). Compost Sock shall be a minimum of 8" in diameter or sized to suit conditions as specified by the Engineer or Contract.
2. Compost material to be dispersed on site, as determined by the Engineer.
3. When placing Compost Sock on slopes, use Erosion Control Blanket if specified by the Engineer and in accordance with Standard Specification 9-14.5(2). See Standard Plan I-60.10.
4. Always install Compost Sock perpendicular to slope and along contour lines.
5. Remove sediment from the up slope side of the Compost Sock when accumulation has reached 1/2 of the effective height of the Compost Sock.
6. Live stakes can be used in addition to wooden stakes and shall be in accordance with Standard Specification 9-14.6(1). See plans for species selection and spacing.

DETAIL - COMPOST SOCK

REF: WSDOT STD PLAN I-30.40-00
NOT TO SCALE

TESC / SWPPP NOTES

KIMBERLY-CLARK MILL SITE CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS:	APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: NONE

PROJECT NUMBER: KMBY00000010

DRAWING FILE: ecFG003KMBY00000010

SHEET NO. 3 OF 7

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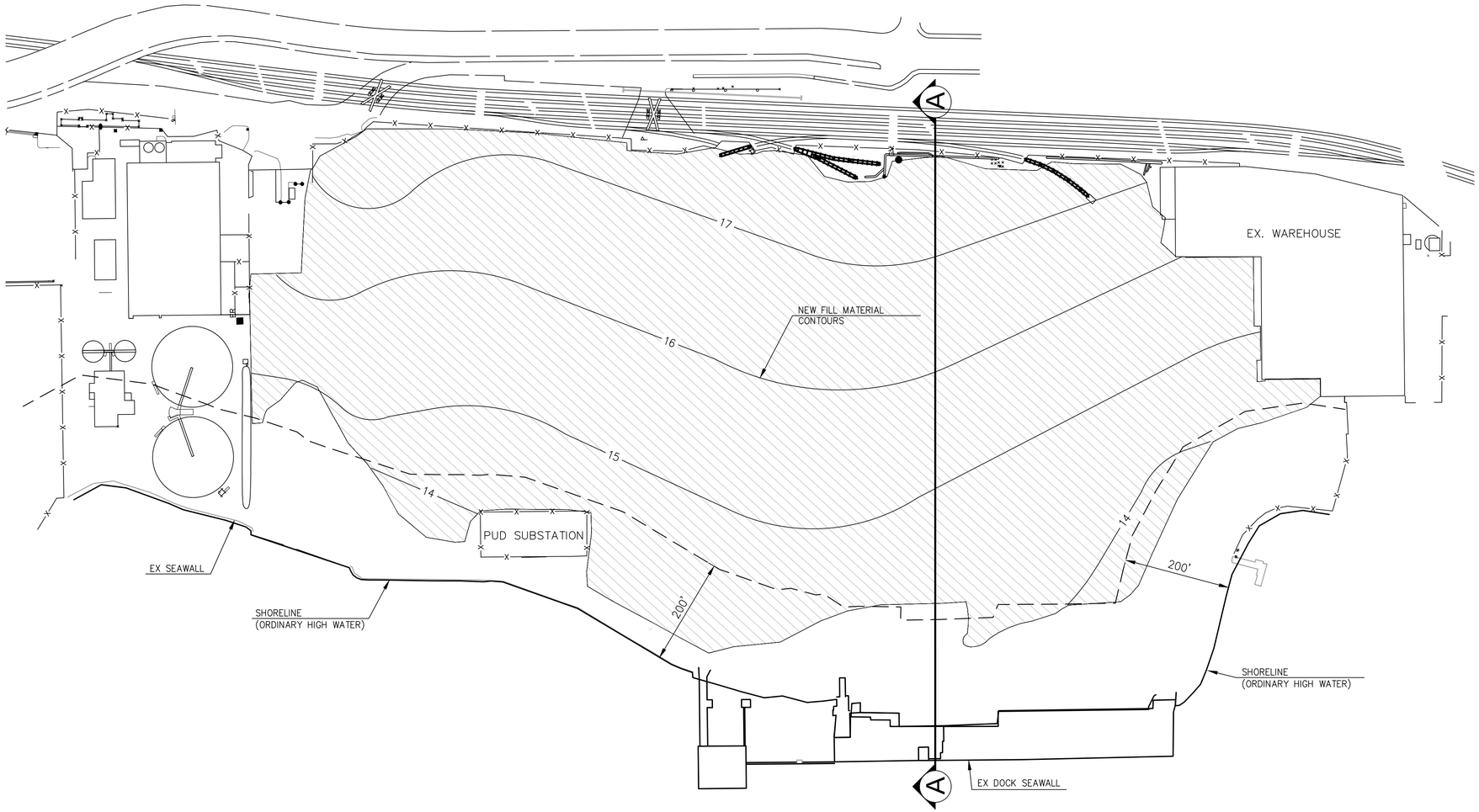
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

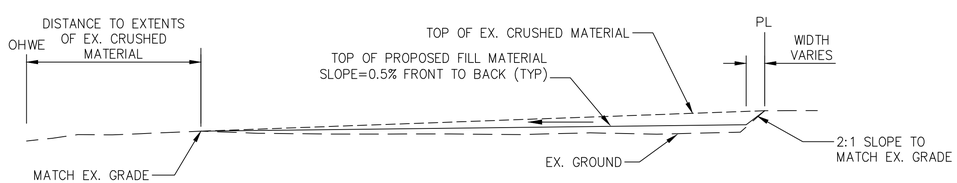
NORTH

0 60 120 240

SCALE: 1"=120'

CALL
2 BUSINESS DAYS
BEFORE YOU DIG
FOR UTILITY LOCATE
811





SECTION A-A
NO SCALE

DEVELOPMENT DATA:

APPLICANT: KIMBERLY-CLARK WORLDWIDE INC
2600 FEDERAL AVE.
EVERETT, WASHINGTON 98201
425.210.3284
ATTENTION: BRYAN LUST, PROJECT ENGINEER

ENGINEER/PLANNER
SURVEYOR: DAVID EVANS and ASSOCIATES, INC.
1620 W. MARINE VIEW DR. SUITE 200
EVERETT, WASHINGTON 98201
425.259.4099
ATTENTION: JOHN SMITH, P.E.

APPROXIMATE QUANTITIES

REMOVAL

CRUSHED MATERIAL – 115,000 TO 130,000 CY

EARTHWORK

NEW MATERIAL:
45,000 TO 55,000 CY (IMPORT)

FILL MATERIAL AREA

SITE CONDITIONS AFTER REMOVAL

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
ecFG004KMBY00000010

SHEET NO.
4
OF 7

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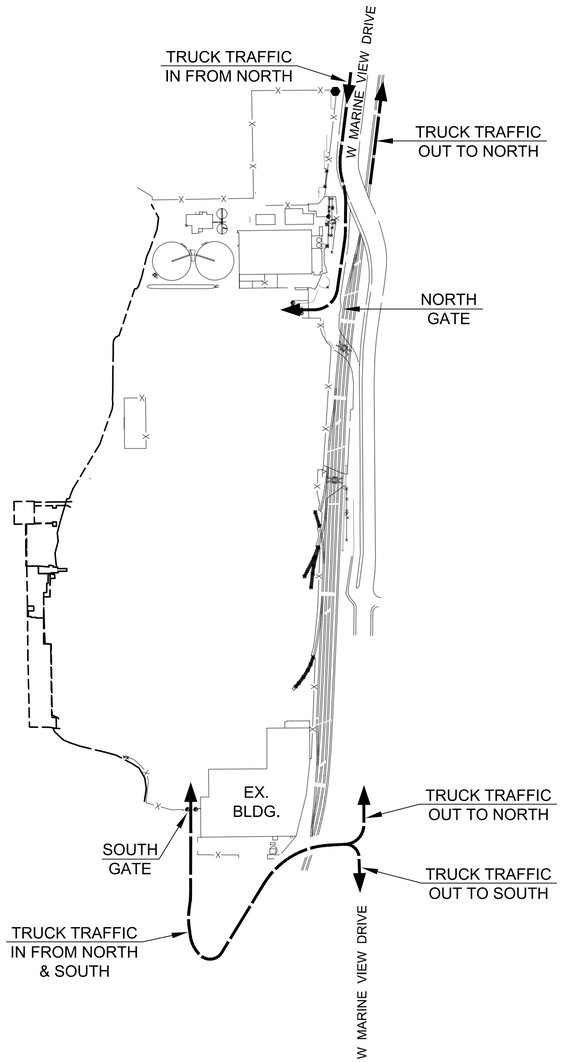
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

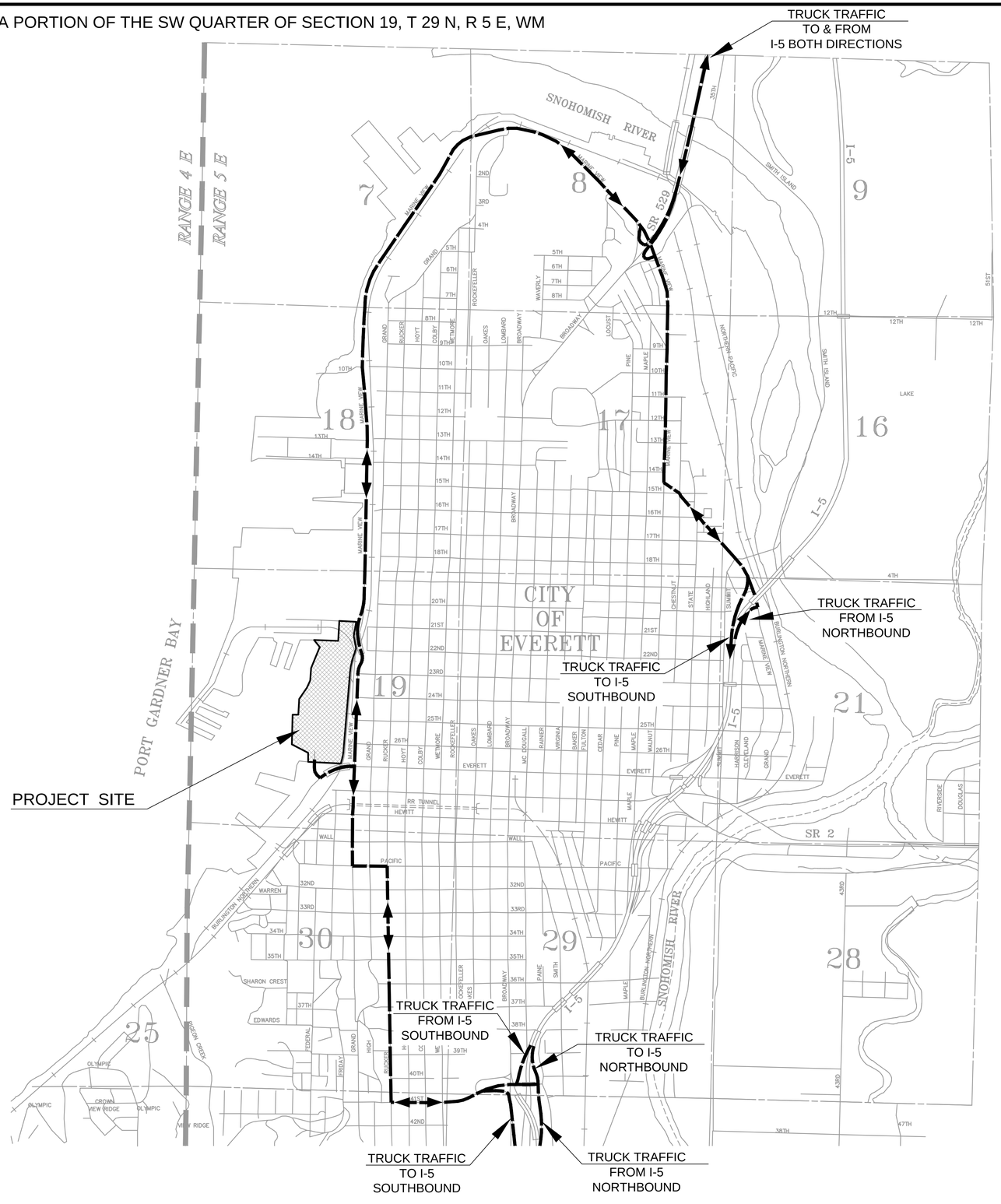
CONSTRUCTION NOTES

1. IT IS ANTICIPATED THAT THE TOTAL DAILY TRUCK TRIPS WILL BE APPROXIMATELY 4 TO 6 TRUCKS/HR

NORTH
0 150 300 600



SITE HAUL PLAN
SCALE: 1"=300'



TRUCK HAUL ROUTES
SCALE: 1"=1200'

NORTH
0 600 1200 2400

HAUL ROUTE EXHIBIT

KIMBERLY-CLARK EVERETT PLANT BUILDING DEMOLITION

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS:	APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: AS NOTED

PROJECT NUMBER:
KMBY00000010

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SHEET NO.
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OF 7

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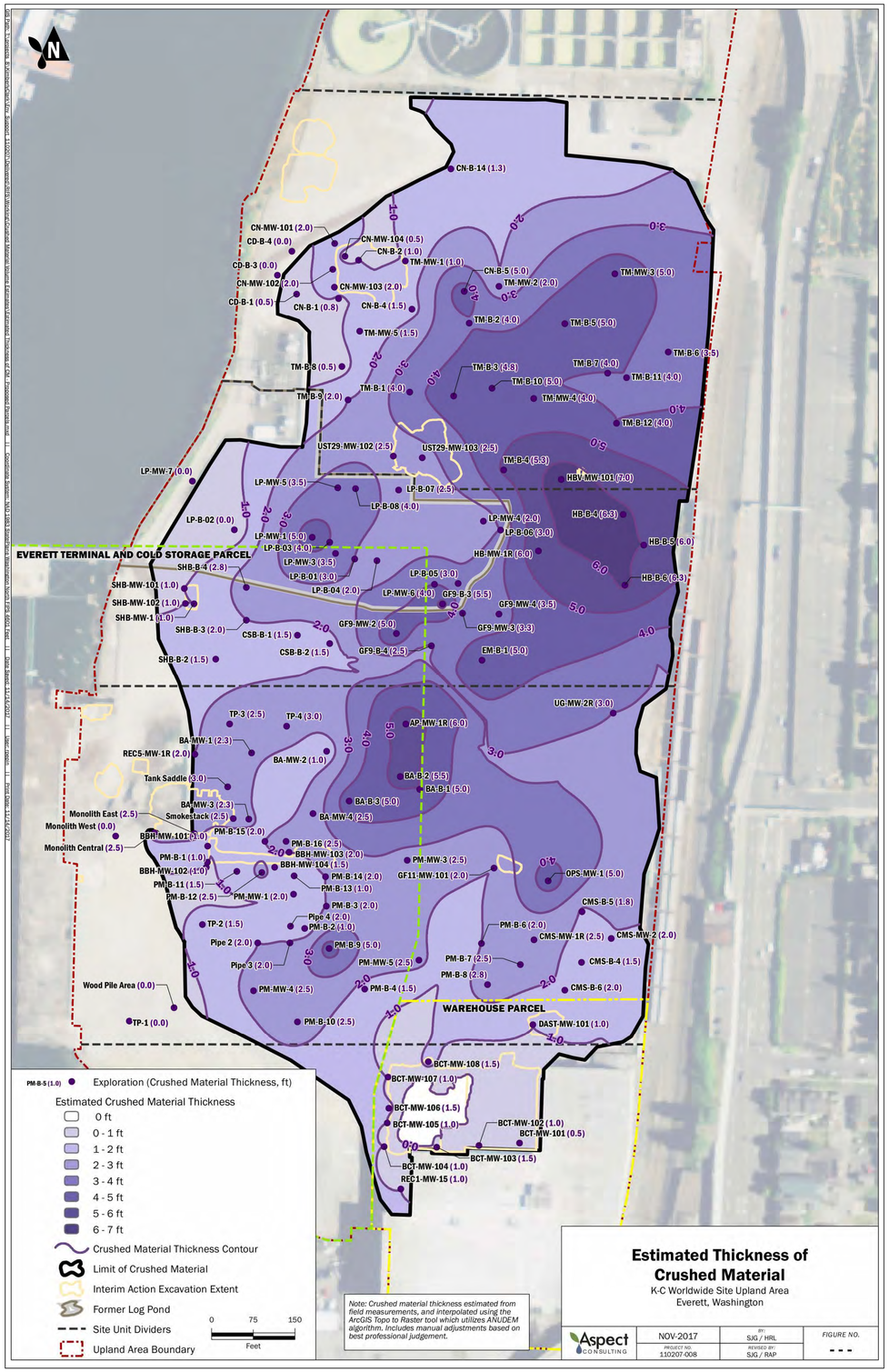
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM



Estimated Thickness of Crushed Material

K-C Worldwide Site Upland Area
Everett, Washington

Aspect Consulting	NOV-2017	BY: SJG / HRL	FIGURE NO. ---
	PROJECT NO. 110207-008	REVISED BY: SJG / RAP	

NORTH
0 600 1200 2400

CRUSHED MATERIAL THICKNESS EXHIBIT

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: AS NOTED

PROJECT NUMBER: KMBY00000010

DRAWING FILE: ecFG005KMBY00000010

SHEET NO. 6 OF 7

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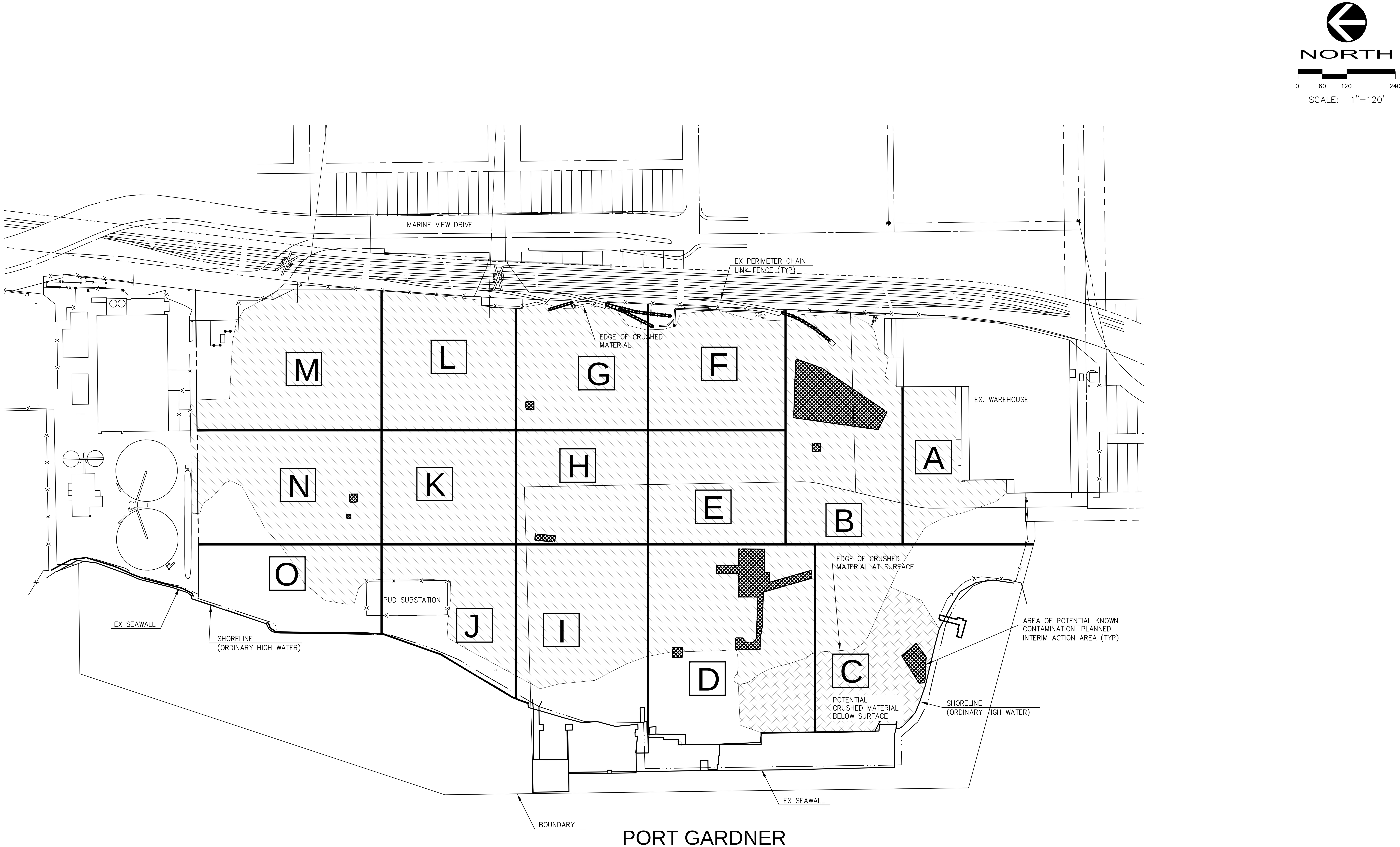

EXCAVATION SEQUENCING AREAS

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER: KMBY00000010

DRAWING FILE: ecFG001KMBY00000010

SHEET NO. 7 OF 7

CALL 2 BUSINESS DAYS BEFORE YOU DIG FOR UTILITY LOCATE 811

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APPENDIX

Construction Stormwater General Permit (CSWGP)

Stormwater Pollution Prevention Plan (SWPPP)

for

Kimberly-Clark Former Mill Site Everett

Prepared for:

Department of Ecology

Northwest Regional Ofiice

Permittee / Owner	Developer	Operator / Contractor
Kimberly Clark Worldwide, Inc.	Kimberly Clark Worldwide, Inc.	TBD

2600 Federal Ave
Everett, WA 98201

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
TBD	TBD	TBD

SWPPP Prepared By

Name	Organization	Contact Phone Number
John Smith, P.E.	David Evans and Associates, Inc.	425-405-1509

SWPPP Preparation Date

07/27/2018

Project Construction Dates

Activity / Phase	Start Date	End Date
Concrete Material Removal	10/01/2018	10/01/2019

Note: This SWPPP will be finalized, including potential modifications, once the construction Contractor is selected and the project schedule known.

List of Acronyms and Abbreviations

Acronym / Abbreviation	Explanation
303(d)	Section of the Clean Water Act pertaining to Impaired Waterbodies
BFO	Bellingham Field Office of the Department of Ecology
BMP(s)	Best Management Practice(s)
CESCL	Certified Erosion and Sediment Control Lead
CO_2	Carbon Dioxide
CRO	Central Regional Office of the Department of Ecology
CSWGP	Construction Stormwater General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ERO	Eastern Regional Office of the Department of Ecology
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
GULD	General Use Level Designation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
NWRO	Northwest Regional Office of the Department of Ecology
pH	Power of Hydrogen
RCW	Revised Code of Washington
SPCC	Spill Prevention, Control, and Countermeasure
Su	Standard Units
SWMMEW	Stormwater Management Manual for Eastern Washington
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
SWRO	Southwest Regional Office of the Department of Ecology
TMDL	Total Maximum Daily Load
VFO	Vancouver Field Office of the Department of Ecology
WAC	Washington Administrative Code
WSDOT	Washington Department of Transportation
WWHM	Western Washington Hydrology Model

Project Information (1.0)

Project/Site Name: Kimberly Clark Former Mill Site
Street/Location: 2600 Federal Ave
City: Everett State: WA Zip code: 98201
Subdivision: N/A
Receiving waterbody: Puget Sound

Existing Conditions (1.1)

Total acreage (including support activities such as off-site equipment staging yards, material storage areas, borrow areas).

Total acreage: 51 acres (Total property ownership is approximately 69 acres consisting of 58 acres of uplands, 10.7 acres of tide lands. The project limits are defined as 51 acres).

Disturbed acreage: 32 acres

Existing structures: Vacant distribution warehouse at south end of site and an inactive wastewater treatment facility

Landscape topography: Site is generally flat with slight slope towards the west

Drainage patterns: No runoff is currently generated from the site except for a network of 4 catch basins associated with a small paved area used with covered loading docks at the distribution warehouse.

Existing Vegetation: No vegetation exists on site as the entirety of the site is comprised of crushed concrete material.

Critical Areas (wetlands, streams, high erosion risk, steep or difficult to stabilize slopes): There are no critical areas on the site such as high erosion risk areas, wetlands, streams, or steep slopes (potential landslide area). The site is located on the shoreline of Port Gardner Bay. The limits of work will be outside of a 25 foot shoreline buffer.

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody: Based on review of Ecology's 303(d) list, the East Waterway adjacent to the project Site is currently listed as Category 5 for sediment bioassay.

Table 1 includes a list of suspected and/or known contaminants associated with the construction activity.

Table 1 – Summary of Site Pollutant Constituents

Constituent (Pollutant)	Location	Depth	Concentration
Arsenic	Throughout CM	0-5 ft	5 to 31 mg/kg
Cadmium	Throughout CM	0-5 ft	0.6 to 2.7 mg/kg
Carcinogenic polycyclic aromatic hydrocarbons (cPAHs)	Throughout CM	0-5 ft	0.07 to 3.9 mg/kg (total cPAHs*)
Polychlorinated biphenyls (PCBs)	Throughout CM	0-5 ft	0.03 to 1.7 mg/kg (total PCBs)

*: Expressed as total toxic equivalent concentration of benzo(a)pyrene in accordance with MTCA (173-340-708(e)(iii).

Proposed Construction Activities (1.2)

Description of site development:
The proposed project involves up to 32 acres of soil disturbance for removal of existing CM and proposed remediation activities.

Description of construction activities (example: site preparation, demolition, excavation):
Construction activities may include temporary erosion and sedimentation control installation, utility capping/removal/de-energizing, remediation activities for recognized environmental conditions (REC), and final site stabilization.

Description of site drainage including flow from and onto adjacent properties. Must be consistent with Site Map in Appendix A:
On site drainage patterns shall remain the same as the pre-construction condition. No runoff shall be generated from the site except for a network of 4 catch basins associated with a small paved area used with covered loading docks at the distribution warehouse. Please refer to the Site Map located within Appendix A.

Description of final stabilization (example: extent of revegetation, paving, landscaping):
The site shall be stabilized upon completion of the project through implementation of mulching and seeding per BMPs C120 and C121.

Contaminated Site Information:
Proposed activities regarding contaminated soils or groundwater (example: on-site treatment system, authorized sanitary sewer discharge):
The preposed actions will involve excavation and proper off-Site disposal crushed concrete materials, with concurrent dewatering, as needed, to facilitate removal and handling. This action

will be limited solely to the Upland Area (bounded on the west by the mean higher high-water elevation) and will not include any work in the in-water area (East Waterway).

Work performed by the Contractor shall consist of providing all labor, supervision, material, and equipment necessary for all excavation, dewatering, disposal, demolition, and reconstruction activities as specified by the contract.

It is the Contractor's responsibility to furnish, install, protect, maintain, remove, control, and dispose of construction stormwater and erosion controls, vegetation and soil protection, and pollutant prevention and countermeasures. These controls will prevent erosion, and prevent conveyance of pollutants and sediment into surface waters, drainage systems, and environmentally critical areas.

All work performed by the Contractor and subcontractors shall be performed per Contract Specifications.

Construction Stormwater Best Management Practices (BMPs) (2.0)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e. hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

The 12 Elements (2.1)

Element 1: Preserve Vegetation / Mark Clearing Limits (2.1.1)

To protect adjacent properties and to reduce the area of soil exposed to construction, the limits of construction will be clearly marked before land-disturbing activities begin. Areas that are to be preserved, as well as all sensitive areas and their buffers, shall be clearly delineated, both in the field and on the plans.

List and describe BMPs: High Visibility Plastic or Metal Fence (BMP C103)
Alternative BMP not included in the SWMMWW (2005)

Alternate BMPs for marking clearing limits are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the conditions of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 2: Establish Construction Access (2.1.2)

Construction access or activities occurring on unpaved areas shall be minimized, yet where necessary, access points shall be stabilized to minimize the tracking of sediment onto public roads, and wheel washing, street sweeping, and street cleaning shall be employed to prevent sediment from entering state waters. All wash wastewater shall be controlled on site with measures described in Element #9.

List and describe BMPs: Construction Road/Parking Area Stabilization (BMP C107)
Stabilized Construction Entrance (BMP C105)
Wheel Wash (BMP C106)
Alternative BMP not included in the SWMMWW (2005)

Alternate construction access BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the conditions of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 3: Control Flow Rates (2.1.3)

In order to protect the properties and waterways downstream of the project site, stormwater discharges from the site will be managed through implementation of temporary sediment ponds if deemed necessary by the CESCL.

Will you construct stormwater retention and/or detention facilities?
Yes No

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?
Yes No

List and describe BMPs: Temporary Sediment Ponds (BMP C241)
Alternative BMP not included in the SWMMWW (2005)

Alternate flow control BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the conditions of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 4: Install Sediment Controls (2.1.4)

All stormwater runoff from disturbed areas shall pass through an appropriate sediment removal BMP before leaving the construction site or prior to being discharged to an infiltration facility.

List and describe BMPs: Compost Sock (BMP C233 silt fence alternative, Filtrexx® or SiltSoxx®)
Silt Fence (BMP C233)
Temporary Sediment Ponds (BMP C241)
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005)

Alternate sediment control BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the conditions of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

In addition, sediment will be removed as needed from paved areas in and adjacent to construction work areas manually or using mechanical sweepers to minimize tracking of sediments on vehicle tires away from the site and to minimize washoff of sediments from adjacent streets. Sediment-laden water will not be discharged onto level onsite vegetated areas (BMP C240) because no such vegetated areas are present on site.

In some cases, sediment discharge in concentrated runoff can be controlled using permanent stormwater BMPs (e.g., infiltration swales, ponds, trenches). Sediment loads can limit the effectiveness of some permanent stormwater BMPs, such as those used for infiltration or biofiltration; however, those BMPs designed to remove solids by settling (wet ponds or detention ponds) can be used during the construction phase. When permanent stormwater BMPs will be used to control sediment discharge during construction, the structure will be protected from excessive sedimentation with adequate erosion and sediment control BMPs. Any accumulated sediment shall be removed after construction is complete and the permanent stormwater BMP will be reestablished with vegetation per applicable design requirements.

The following BMPs will be implemented as end-of-pipe sediment controls as required to meet permitted turbidity limits in the site discharge(s). Prior to the implementation of these technologies, sediment sources and erosion control and soil stabilization BMP efforts will be maximized to reduce the need for end-of-pipe sedimentation controls.

1. Construction Stormwater Filtration (BMP C251)

2. Construction Stormwater Chemical Treatment (BMP C250) (implemented only with prior written approval from Ecology).

3. Discharge to City of Everett Sanitary Sewer (implemented only with prior written approval from the City of Everett)

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 5: Stabilize Soils (2.1.5)

Exposed and unworked soils shall be stabilized with the application of effective BMPs to prevent erosion throughout the life of the project. In general, cut and fill slopes will be stabilized as soon as possible and soil stockpiles will be temporarily covered with plastic sheeting. All stockpiled soils shall be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

West of the Cascade Mountains Crest

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	May 1 – September 30	7 days
During the Wet Season	October 1 – April 30	2 days

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: 10/01/2018 End date: 10/0102019

Will you construct during the wet season?
Yes No

List and describe BMPs:
Temporary and Permanent Seeding (BMP C120)
Mulching (BMP C121)
Plastic Covering (BMP C123)
Dust Control (BMP C140)
Construction Road/Parking Area Stabilization (BMP C107)
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005)

Alternate soil stabilization BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the conditions of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 6: Protect Slopes (2.1.6)

This site is flat and shall remain as such throughout the construction process. As there are no existing or proposed exposed slopes on site, no best management practices for protection of slopes shall be implemented.

Will steep slopes be present at the site during construction?
Yes No

List and describe BMPs: None.

Alternate slope protection BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the conditions of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Installation Schedules: NA

Inspection and Maintenance plan: NA

Responsible Staff: NA

Element 7: Protect Drain Inlets (2.1.7)

All storm drain inlets and culverts existing or made operable during construction shall be protected to prevent unfiltered or untreated water from entering the drainage conveyance system. However, the first priority is to keep all access roads clean of sediment and keep street wash water separate from entering storm drains until treatment can be provided. Storm Drain Inlet Protection (BMP C220) will be implemented for all drainage inlets and culverts that could potentially be impacted by sediment-laden runoff on and near the project site.

List and describe BMPs: Storm Drain Inlet Protection (BMP C220 or alternative Filtrexx® InletSoxx®)
Alternative BMP not included in the SWMMWW (2005)

If the BMP options listed above are deemed ineffective or inappropriate during construction to satisfy the requirements set forth in the General NPDES Permit (Appendix E), or if no BMPs are listed above but deemed necessary during construction, the Certified Erosion and Sediment Control Lead shall implement one or more of the alternative BMP inlet protection options listed in Appendix B.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 8: Stabilize Channels and Outlets (2.1.8)

Where site runoff is to be conveyed in channels, or discharged to a stream or some other natural drainage point, efforts will be taken to prevent downstream erosion.

Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches, will be installed at the outlets of all conveyance systems.

List and describe BMPs: Outlet Protection (BMP C209)
Alternative BMP not included in the SWMMWW (2005)

Alternate channel and outlet stabilization BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate during construction to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Element 9: Control Pollutants (2.1.9)

The following pollutants are anticipated to be present on-site:

Table 2 – Pollutants

Pollutant (and source, if applicable)
All listed constituants were found to be resident in the crushed concrete being removed.
Arsenic - 5 to 31 mg/kg
Cadmium - 0.6 to 2.7 mg/kg
Carcinogenic polycyclic aromatic hydrocarbons (cPAHs) - 0.07 to 3.9 mg/kg (total cPAHs*)
Polychlorinated biphenyls (PCBs) - 0.03 to 1.7 mg/kg (total PCBs)

*: Expressed as total toxic equivalent concentration of benzo(a)pyrene in accordance with MTCA (173-340-708(e)(iii).

All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause impact to the stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well organized, and free of debris.

List and describe BMPs: [Insert text here]

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?
Yes No

List and describe BMPs:

- All vehicles, equipment, and petroleum product storage/dispensing areas will be inspected regularly to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.
- On-site fueling tanks and petroleum product storage containers shall include secondary containment.

- Spill prevention measures, such as drip pans, will be used when conducting maintenance and repair of vehicles or equipment.
- In order to perform emergency repairs on site, temporary plastic will be placed beneath and, if raining, over the vehicle.
- Contaminated surfaces shall be cleaned immediately following any discharge or spill incident.

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Will wheel wash or tire bath system BMPs be used during construction?
Yes No

List and describe BMPs:

- Wheel wash or tire bath wastewater shall be discharged to a separate on-site treatment system or to the sanitary sewer as part of Wheel Wash implementation (BMP C106).

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Will pH-modifying sources be present on-site?
Yes No

Table 3 – pH-Modifying Sources

	None
	Bulk cement
	Cement kiln dust
	Fly ash
	Other cementitious materials
	New concrete washing or curing waters
	Waste streams generated from concrete grinding and sawing
	Exposed aggregate processes
	Dewatering concrete vaults
	Concrete pumping and mixer washout waters
X	Recycled concrete

	Other (i.e. calcium lignosulfate) [please describe]

List and describe BMPs: [Insert text here]

Installation Schedules: [Insert text here]

Inspection and Maintenance plan: [Insert text here]

Responsible Staff: [Insert text here]

Concrete trucks must not be washed out onto the ground, or into storm drains, open ditches, streets, or streams. Excess concrete must not be dumped on-site, except in designated concrete washout areas with appropriate BMPs installed.

Element 10: Control Dewatering (2.1.10)

K-C will obtain a discharge authorization (DA) from the City of Everett (City) industrial pretreatment program to allow discharge of pretreated excavation dewatering water, and stormwater if needed, generated during the excavation activity. All water collected from dewatering activities will be collected and pretreated on-Site using a temporary treatment system appropriately sized by the Contractor to accommodate required dewatering water flow rates, meet any flow or water quality restrictions under the DA, and include redundancy. After settling and treatment, the water will then be discharged to the City's wastewater treatment plant via their sanitary sewer in accordance with the DA requirements. Treated water not in compliance with the City discharge limits will be rerun through the treatment system, with treatment adjustments, as needed, until passing discharge limits or it will be containerized, characterized, and sent for off-Site disposal. No dewatering water or other sediment-laden water will be allowed to enter surface waters.

Alternate dewatering control BMPs are included in Appendix B as a quick reference tool for the onsite inspector in the event the BMP(s) listed above are deemed ineffective or inappropriate during construction to satisfy the requirements set forth in the General NPDES Permit (Appendix E). To avoid potential erosion and sediment control issues that may cause an exceedence of the NPDES Construction Stormwater permit (as provided in Appendix E), the Certified Erosion and Sediment Control Lead will promptly initiate the implementation of one or more of the alternative BMPs listed in Appendix B after the first sign that existing BMPs are ineffective.

Table 4 – Dewatering BMPs

	Infiltration
	Transport off-site in a vehicle (vacuum truck for legal disposal)
	Ecology-approved on-site chemical treatment or other suitable treatment technologies
X	Sanitary or combined sewer discharge with local sewer district approval (last resort)
	Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

List and describe BMPs: [Insert Text Here]

Installation Schedules: [Insert Text Here]

Inspection and Maintenance plan: [Insert Text Here]

Responsible Staff: [Insert Text Here]

Element 11: Maintain BMPs (2.1.11)

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW or Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

Element 12: Manage the Project (2.1.12)

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:
    - Inspection, maintenance and repair of all BMPs will occur as needed to ensure performance of their intended function.
    - Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the Site Map. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.
- Maintain an updated SWPPP.
    - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Table 5 – Management

	Design the project to fit the existing topography, soils, and drainage patterns
X	Emphasize erosion control rather than sediment control
X	Minimize the extent and duration of the area exposed
X	Keep runoff velocities low
X	Retain sediment on-site
X	Thoroughly monitor site and maintain all ESC measures
	Schedule major earthwork during the dry season
	Other (please describe)

Table 6 – BMP Implementation Schedule

Phase of Construction Project	Stormwater BMPs	Date	Wet/Dry Season
[Insert construction activity]	High Visibility Plastic or Metal Fence (BMP C103)	[MM/DD/YYYY]	[Insert Season]
	Stabilized Construction Entrance (BMP C105)		
	Wheel Wash (BMP C106)		
	Construction Road/Parking Area Stabilization (BMP C107)		
	Temporary and Permanent Seeding (BMP C120)		
	Mulching (BMP C121)		
	Plastic Covering (BMP C123)		
	Dust Control (BMP C140)		
	Materials on Hand (BMP C150)		
	Concrete Handling measures (BMP C151)		
	Material Delivery, Storage and Containment (BMP C153)		
	Outlet Protection (BMP C209)		
	Storm Drain Inlet Protection (BMP C220 or alternative Filtrexx® InletSoxx®)		
	Construction Stormwater Chemical Treatment (BMP C250		
	Construction Stormwater Filtration (BMP C251)		
	Compost Sock (BMP C233 silt fence alternative, Filtrexx® or SiltSoxx®)		
	Temporary Sediment Ponds (BMP C241)		

Phase of Construction Project	**Stormwater BMPs**	**Date**	**Wet/Dry Season**
[Insert construction activity]	[Insert BMP]	[MM/DD/YYYY]	[Insert Season]

Element 13: Protect Low Impact Development (LID) BMPs (2.1.13)

No Low Impact Development exists at the site.

Pollution Prevention Team (3.0)

Table 7 – Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	To be provided by Contractor	[Insert Number]
Resident Engineer	John Smith	425-259-4099
Emergency Ecology Contact	Kevin Fitzpatrick or TBD	425-649-7000
Emergency Permittee/ Owner Contact	Bryan Lust	425-259-5702
Non-Emergency Owner Contact	Kevin Fitzpatrick or TBD	425-649-7000
Monitoring Personnel	To be provided by Contractor	Insert Number
Ecology Regional Office	[Insert Regional Office]	[Insert General Number]

Monitoring and Sampling Requirements (4.0)

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site log book. A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

File a blank form under Appendix D.

The site log book must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

Numeric effluent limits may be required for certain discharges to 303(d) listed waterbodies. See CSWGP Special Condition S8 and Section 5 of this template.

Complete the following paragraph for sites that discharge to impaired waterbodies for fine sediment, turbidity, phosphorus, or pH:

The receiving waterbody, Puget Sound, is impaired for: sediment bioassay. All stormwater and dewatering discharges from the site are subject to an **effluent limit** of 25 NTU for turbidity.

Site Inspection (4.1)

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

The discharge point(s) are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

Stormwater Quality Sampling (4.2)

Turbidity Sampling (4.2.1)

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at all discharge points at least once per calendar week.

Method for sampling turbidity:

Table 8 – Turbidity Sampling Method

X	Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size)
	Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size)

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge's turbidity is 26 to 249 NTU **or** the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
3. Document BMP implementation and maintenance in the site log book.

If the turbidity exceeds 250 NTU **or** the transparency is 6 cm or less at any time, the following steps will be conducted:

1. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) within 24 hours. https://www.ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue
    - Central Region (Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima): (509) 575-2490
    - Eastern Region (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
    - Northwest Region (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000
    - Southwest Region (Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, Wahkiakum,): (360) 407-6300
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period
3. Document BMP implementation and maintenance in the site log book.
4. Continue to sample discharges daily until one of the following is true:
    - Turbidity is 25 NTU (or lower).
    - Transparency is 33 cm (or greater).

- Compliance with the water quality limit for turbidity is achieved.
    - 1 - 5 NTU over background turbidity, if background is less than 50 NTU
    - 1% - 10% over background turbidity, if background is 50 NTU or greater
- The discharge stops or is eliminated.

pH Sampling (4.2.2)

pH monitoring is required for “Significant concrete work” (i.e. greater than 1000 cubic yards poured concrete or recycled concrete over the life of the project).The use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD] or fly ash) also requires pH monitoring.

For significant concrete work, pH sampling will start the first day concrete is poured and continue until it is cured, typically three (3) weeks after the last pour.

For engineered soils and recycled concrete, pH sampling begins when engineered soils or recycled concrete are first exposed to precipitation and continues until the area is fully stabilized.

If the measured pH is 8.5 or greater, the following measures will be taken:

1. Prevent high pH water from entering storm sewer systems or surface water.
2. Adjust or neutralize the high pH water to the range of 6.5 to 8.5 su using appropriate technology such as carbon dioxide (CO_2) sparging (liquid or dry ice).
3. Written approval will be obtained from Ecology prior to the use of chemical treatment other than CO_2 sparging or dry ice.

Method for sampling pH:

Table 8 – pH Sampling Method

	pH meter
	pH test kit
X	Wide range pH indicator paper

Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies (5.0)

303(d) Listed Waterbodies (5.1)

Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

Yes No

List the impairment(s):

Based on review of Ecology's 303(d) list, the East Waterway adjacent to the project Site is currently listed as Category 5 for sediment bioassay, which relates to the chemical quality of the sediment in the East Waterway.

All stormwater and dewatering discharges from the site are subject to an **effluent limit** of 25 NTU for turbidity. In compliance with S8.C of the CSWGP, 25 NTUs shall not be exceeded at the point where stormwater is discharged from the site.

As an alternative to the 25 NTUs effluent limit at the point where stormwater is discharged off-site, permittees may choose to comply with the surface water quality standard for turbidity as described within S8.C.2.a.

In order to prevent sediment-laden waters from entering the Puget Sound, appropriate sediment control BMPs shall be implemented prior to commencement of construction and shall be maintained throughout the life of the project.

List and describe BMPs:

Compost Sock (BMP C233 silt fence alternative, Filtrexx® or SiltSoxx®)
Silt Fence (BMP C233)
Temporary Sediment Ponds (BMP C241)
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005)

TMDL Waterbodies (5.2)

Waste Load Allocation for CWSGP discharges:

No TMDL has been developed to address the 303(d) impairment for sediment bioassay in the East Waterway. However, the East Waterway is under an Agreed Order between Department of Ecology and multiple parties to investigate and remediate contaminated sediment, which will address the sediment conditions that led to the 303(d) impairment.

In order to prevent sediment-laden waters from entering the Puget Sound, appropriate sediment control BMPs shall be implemented prior to commencement of construction and shall be maintained throughout the life of the project.

List and describe BMPs:

Compost Sock (BMP C233 silt fence alternative, Filtrexx® or SiltSoxx®)
Silt Fence (BMP C233)
Temporary Sediment Ponds (BMP C241)
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005)

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

The Construction Stormwater General Permit Proposed New Discharge to an Impaired Water Body form is included in Appendix F.

Reporting and Record Keeping (6.0)

Record Keeping (6.1)

Site Log Book (6.1.1)

A site log book will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

Records Retention (6.1.2)

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Log Book

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

Updating the SWPPP (6.1.3)

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- 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 waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

Reporting (6.2)

Discharge Monitoring Reports (6.2.1)

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting "No Discharge". The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology's WQWebDMR System.

https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance

Notification of Noncompliance (6.2.2)

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- Central Region at (509) 575-2490 for Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, or Yakima County
- Eastern Region at (509) 329-3400 for Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, or Whitman County
- Northwest Region at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County
- Southwest Region at (360) 407-6300 for Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Pierce, Skamania, Thurston, or Wahkiakum

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO_2 sparging is planned for adjustment of high pH water.

Appendix/Glossary

A. Site Map
B. Alternative BMPs and BMP Details
C. Correspondence (N/A)
D. Site Inspection Form
E. Construction Stormwater General Permit (CSWGP)
F. 303(d) List Waterbodies / TMDL Waterbodies Information
G. Contaminated Site Information (N/A)
H. Engineering Calculations

Appendix A

Site Map

KIMBERLY-CLARK EVERETT
CRUSHED MATERIAL REMOVAL PLANS

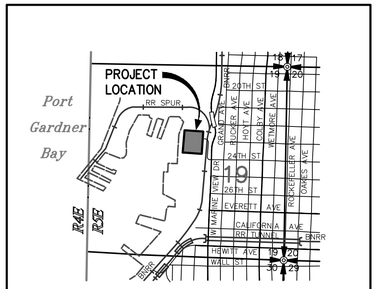
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

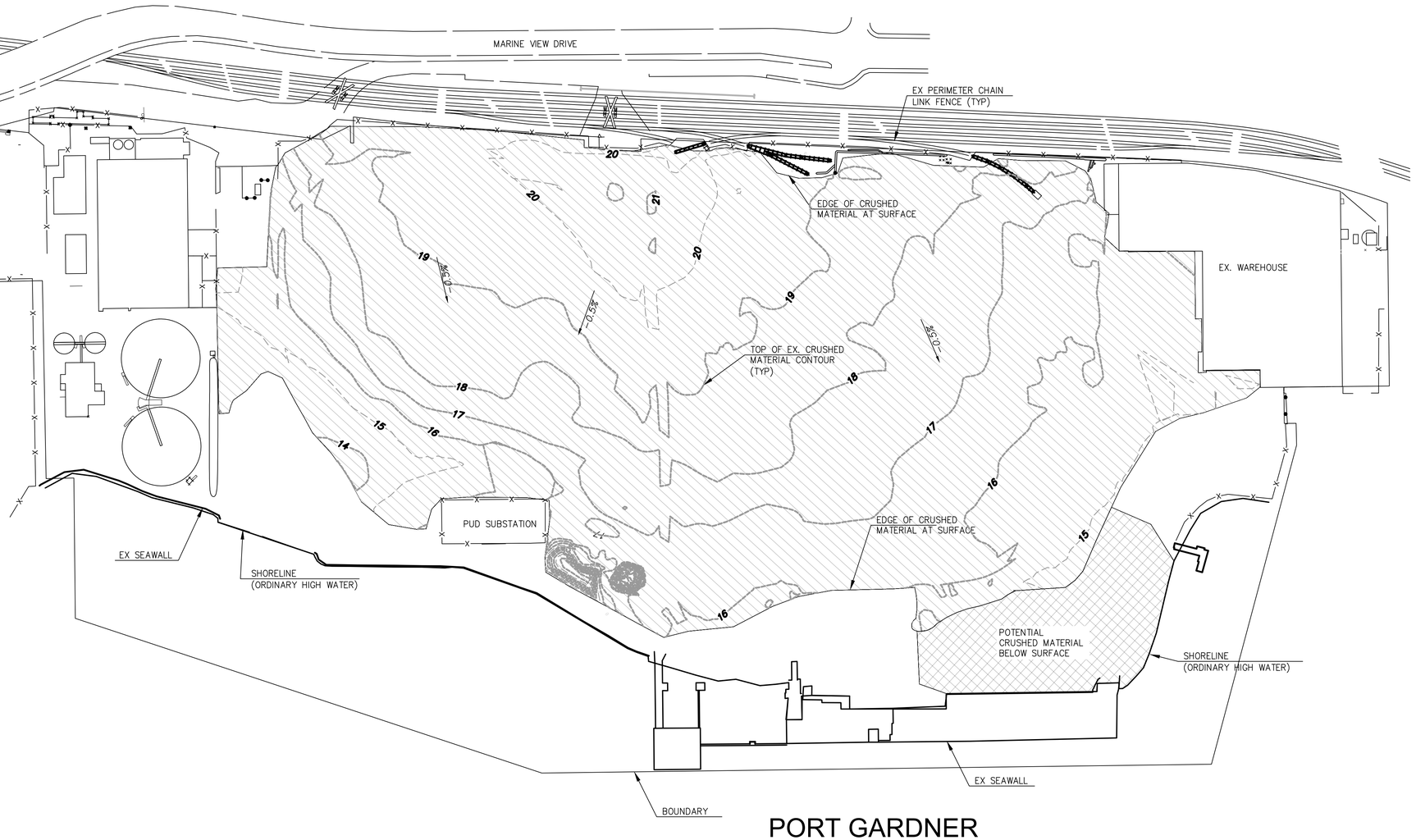
NORTH

0 60 120 240

SCALE: 1"=120'

CALL
2 BUSINESS DAYS
BEFORE YOU DIG
FOR UTILITY LOCATE
811





DEVELOPMENT DATA:

APPLICANT: KIMBERLY-CLARK WORLDWIDE INC
2600 FEDERAL AVE
EVERETT, WASHINGTON 98201
425.210.3284
ATTENTION: BRYAN LUST, PROJECT ENGINEER

ENGINEER/PLANNER
SURVEYOR: DAVID EVANS and ASSOCIATES, INC.
1620 W. MARINE VIEW DR. SUITE 200
EVERETT, WASHINGTON 98201
425.259.4099
ATTENTION: JOHN SMITH, P.E.

SITE DATA:

TAX PARCEL NUMBER: 29051900201500
29051900201300
29051900201100
29051900201000
29051900200900
29051900200200
29051900200100
00597761803000
00597761801000
00597761800600
00437461700200
00437461803901

PRESENT USE: VACANT

EXISTING ZONING: M-2 HEAVY MANUFACTURING

TOTAL AREA: 69.0 ACRES

SHEET INDEX:

SITE PLAN - EXISTING CONDITIONS

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
ecFG001KMBY00000010

SHEET NO.
1
OF 7

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A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

NORTH

0 60 120 240

SCALE: 1"=120'

CALL
2 BUSINESS DAYS
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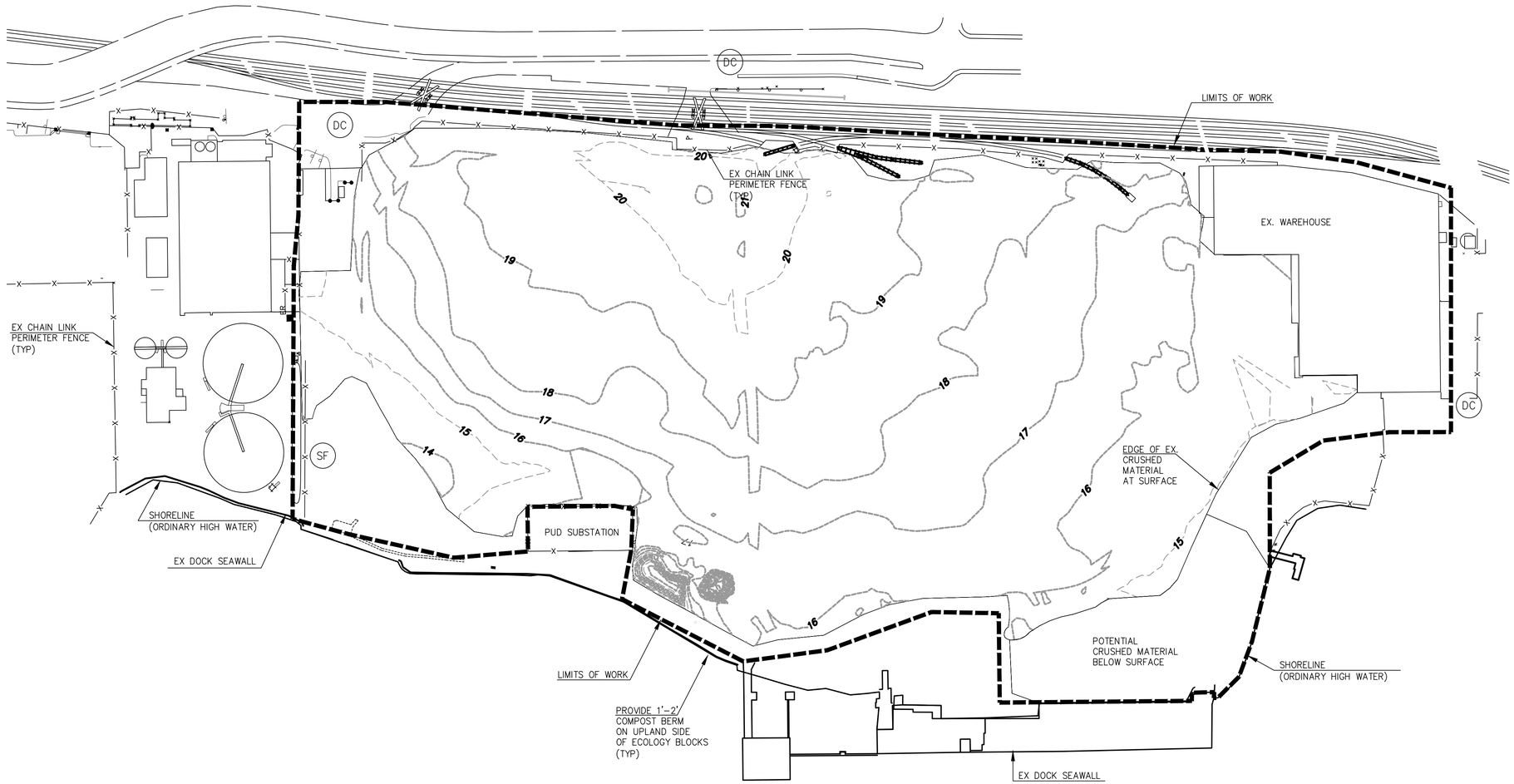
811



DEVELOPMENT DATA:

APPLICANT:	KIMBERLY-CLARK WORLDWIDE INC 2600 FEDERAL AVE. EVERETT, WASHINGTON 98201 425.210.3284 ATTENTION: BRYAN LUST, PROJECT ENGINEER
ENGINEER/PLANNER SURVEYOR:	DAVID EVANS and ASSOCIATES, INC. 1620 W. MARINE VIEW DR. SUITE 200 EVERETT, WASHINGTON 98201 425.259.4099 ATTENTION: JOHN SMITH, P.E.

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL MAINTAIN EXISTING PERIMETER FENCE AS WORK LIMITS.
2. SEDIMENT TRAPS TO BE REMOVED AS THE LAST STAGE OF CONSTRUCTION AFTER TRIBUTARY AREAS HAVE BEEN STABILIZED.
3. KIMBERLY-CLARK'S "GENERAL TERMS AND CONDITIONS" WILL APPLY TO ALL CONTRACTORS IN ALL SCOPES OF THE PROJECT.

EROSION CONTROL MONITORING PLAN

1. OBSERVE EROSION CONTROL MEASURES AT THE BEGINNING AND END OF EACH DAY. REPAIR AND OR REPLACE AS NECESSARY TO ASSURE PROPER FUNCTION.
2. OBSERVE COLLECTION FACILITIES DURING PERIODS OF HEAVY RAINFALL AND WET WEATHER CONDITIONS.
3. OBSERVE AND MONITOR STABILIZATION TECHNIQUES. MAKE REPAIRS AND/OR ALTERATIONS AS NECESSARY TO PREVENT EROSION.
4. COMPLY WITH ALL DOE AND COE REQUIREMENTS FOR DISCHARGE OF CONSTRUCTION STORMWATER.

CERTIFIED EROSION CONTROL SPECIALIST:

TO BE PROVIDED BY CONTRACTOR

STANDARD PRACTICE CODING SYSTEM:

CONTRACTOR TO INSTALL AND MAINTAIN ALL EROSION CONTROL BMP'S AS SHOWN ON THIS PLAN IN ACCORDANCE WITH DEPARTMENT OF ECOLOGY STORMWATER POLLUTION PREVENTION REQUIREMENTS SUMMARIZED ON SHEET C5. IF BMP INSTALLATION AND MAINTENANCE IS INADEQUATE TO MEET THESE REQUIREMENTS CONTRACTOR TO PROVIDE ADDITIONAL BMP'S AT NO ADDITIONAL COST TO OWNER.

CODE	BMPs
CE	CONSTRUCTION ENTRANCE (D.O.E. BMP C105)
CPC	CLEAR PLASTIC COVERING (D.O.E. BMP C123)
CS	COMPOST SOCK (WSDOT STD PLAN I-30.40-00)
DC	DUST CONTROL (D.O.E. BMP C140)
IP	CATCH BASIN/INLET SEDIMENT PROTECTION (WSDOT STD PLAN I-40.20-00)
MU	MULCH AND/OR MATTING (D.O.E. BMP C121)
PS	PERMANENT SEEDING (D.O.E. BMP C120)
SF	SILT FENCE (D.O.E. BMP C233)
WW	WHEEL WASH (D.O.E. BMP C106)

TESC / SWPPP PLAN

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS:	APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
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REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
ecFG002KMBY00000010

SHEET NO.
2
OF 7

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A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

THIS STORMWATER POLLUTION PREVENTION PLAN IS PROVIDED IN ACCORDANCE WITH THE TERMS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR CONSTRUCTION ACTIVITIES FOR THIS PROJECT. THE CONTRACTOR IS ADVISED THAT THE PROJECT AREA DRAINS TO WETLANDS AND/OR STATE WATERS AND THAT THE CONTRACTOR IS RESPONSIBLE TO PROTECT THE RECEIVING WATERS FROM DELETERIOUS EFFECTS OF CONSTRUCTION.

THE CONTRACTOR IS REQUIRED TO HAVE A COPY OF THE NPDES PERMIT AS WELL AS THE SWPPP ON SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE EROSION CONTROL MEASURES SHOWN OR DESCRIBED IN THE CONTRACT DOCUMENTS AND ANY ADDITIONAL MEASURES THAT MAY BE REQUIRED BY THE CONTRACTORS MEANS AND METHODS OF CONSTRUCTION AS NEEDED TO CONTROL EROSION AND SEDIMENT AT THE CONSTRUCTION SITE AND TO PREVENT VIOLATION OF SURFACE WATER QUALITY, GROUND WATER QUALITY, OR SEDIMENT MANAGEMENT STANDARDS. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION AND UNTIL ALL DISTURBED EARTH IS STABILIZED IN FINISH GRADES.

THE FOLLOWING DESCRIBES HOW THE CONSTRUCTION SWPPP ADDRESSEES EACH OF THE 12 REQUIRED ELEMENTS. REFER TO THESE PLANS FOR DRAWINGS OF THE PROJECT, VICINITY MAP, SITE MAP, CONVEYANCE SYSTEMS, EROSION AND SEDIMENT CONTROL MEASURES, AND EROSION AND SEDIMENT CONTROL DETAILS.

ELEMENT #1: PRESERVE VEGETATION/MARK CLEARING LIMITS

1. PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES (INCLUDING CLEARING AND GRADING) CLEARLY MARK ALL CLEARING LIMITS AND TREES THAT ARE TO BE PRESERVED WITHIN THE CONSTRUCTION AREA AS SHOWN ON THE DRAWINGS.
2. SILT FENCE, GEOTEXTILE ENCASED BARRIERS, CONSTRUCTION FENCE, ORANGE PLASTIC FENCE, OR OTHER APPROVED MEASURES MAY BE USED TO MARK THE CLEARING LIMITS AT THE CONTRACTOR'S OPTION.
3. THE DUFF LAYER, NATIVE TOPSOIL, AND NATURAL VEGETATION SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM DEGREE PRACTICABLE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C103: HIGH VISIBILITY PLASTIC OR METAL FENCE

ELEMENT #2: ESTABLISH CONSTRUCTION ACCESS

1. CONSTRUCTION VEHICLE ACCESS AND EXIT SHALL BE LIMITED TO ONE ROUTE. REFER TO SHEET 1 OF THESE PLANS FOR THE CONSTRUCTION ENTRANCE LOCATION. ALL ACCESS/EXIT POINTS SHALL BE STABILIZED WITH QUARRY SPALLS, CRUSHED ROCK OR OTHER EQUIVALENT BMP, TO MINIMIZE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADS.
2. IF THE STABILIZED CONSTRUCTION ENTRANCE IS NOT EFFECTIVE IN PREVENTING SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADS, WHEEL WASH OR TIRE BATHS SHALL BE LOCATED ON SITE.
3. IF SEDIMENT IS TRACKED OFF SITE, PUBLIC ROADS SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY, OR MORE FREQUENTLY DURING WET WEATHER. SEDIMENT SHALL BE REMOVED FROM ROADS BY SHOVELING OR PICKUP SWEEPING AND SHALL BE TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
4. STREET WASHING IS ALLOWED ONLY AFTER SEDIMENT IS REMOVED AS DESCRIBED ABOVE. STREET WASH WASTEWATER SHALL BE CONTROLLED BY PUMPING BACK ON SITE OR OTHERWISE BE PREVENTED FROM FROM DISCHARGING INTO SYSTEMS TRIBUTARY TO WATERS OF THE STATE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C105: STABILIZED CONSTRUCTION ENTRANCE
BMP C106: WHEEL WASH
BMP C107: CONSTRUCTION ROAD/PARKING AREA STABILIZATION

ELEMENT #3: CONTROL FLOW RATES

1. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM EROSION DUE TO INCREASES IN THE VELOCITY AND PEAK VOLUMETRIC FLOW RATE OF STORMWATER RUNOFF FROM THE PROJECT SITE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C240: SEDIMENT TRAP

ELEMENT #4: INSTALL SEDIMENT CONTROLS

1. THE DUFF LAYER, NATIVE SOIL, AND NATURAL VEGETATION SHALL BE RETAINED IN AN UNDISTURBED STATE TO THE MAXIMUM EXTENT PRACTICABLE.
2. SEDIMENT CONTROL BMPs SHALL BE CONSTRUCTED AS ONE OF THE FIRST STEPS IN GRADING. THESE BMPs SHALL BE FUNCTIONAL BEFORE OTHER LAND DISTURBING ACTIVITIES TAKE PLACE.
3. PRIOR TO LEAVING THE CONSTRUCTION SITE, STORMWATER RUNOFF FROM DISTURBED AREAS SHALL PASS THROUGH AN APPROPRIATE SEDIMENT REMOVAL BMP. RUNOFF FROM FULL STABILIZED AREAS MAY BE DISCHARGED WITHOUT A SEDIMENT REMOVAL BMP, BUT MUST MEET THE FLOW CONTROL PERFORMANCE STANDARD OF ELEMENT #3.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C150: MATERIALS ON HAND
BMP C233: SILT FENCE
BMP C220: STORM DRAIN INLET PROTECTION
BMP C240: SEDIMENT TRAP

ELEMENT #5: STABILIZE SOILS

1. EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF EFFECTIVE BMPs THAT PROTECT THE SOIL FORM EROSIVE FORCES OF RAINDROPS. FLOWING WATER, AND WIND.
2. TO PREVENT EROSION, NO SOILS SHALL REMAIN EXPOSED AND UNWORKED FOR MORE THAN THE TIME PERIODS SET FORTH BELOW:
DURING THE WET SEASON (OCTOBER 1 – APRIL 30): 2 DAYS
DURING THE DRY SEASON (MAY 1 – SEPT. 30): 7 DAYS
THIS STABILIZATION REQUIREMENT APPLIES TO ALL SOILS ON SITE, WHETHER AT FINAL GRADE OR NOT. THESE TIMES MAY BE ADJUSTED BY THE LOCAL PERMITTING AUTHORITY IF IT CAN BE SHOWN THAT SITE CONDITIONS OR THE AVERAGE TIME BETWEEN STORM EVENTS JUSTIFIES A DIFFERENT STANDARD.
3. SOILS SHALL BE STABILIZED AT THE END OF THE SHIFT BEFORE A HOLIDAY OR WEEKEND IF NEEDED BASED ON THE WEATHER FORECAST.
4. SOIL STOCKPILES SHALL BE STABILIZED FROM EROSION, PROTECTED WITH SEDIMENT TRAPPING MEASURES, AND WHERE POSSIBLE, BE LOCATED AWAY FROM STORM DRAIN INLETS, WATERWAYS, AND DRAINAGE CHANNELS.
5. APPLICABLE BMPs INCLUDE, BUT ARE NOT LIMITED TO: TEMPORARY AND PERMANENT SEEDING, SODDING, MULCHING, PLASTIC COVERING, EROSION CONTROL FABRICS AND MATTING, SOIL APPLICATION OF POLYACRYLAMIDE (PAM), THE EARLY APPLICATION OF GRAVEL BASE ON AREAS TO BE PAVED AND DUST CONTROL. SELECT SOIL STABILIZATION MEASURES SHALL BE APPROPRIATE FOR THE TIME OF YEAR, SITE CONDITIONS, ESTIMATED DURATION OF USE, AND THE POTENTIAL WATER QUALITY IMPACTS.
6. REMOVE ALL TESC MEASURES AS SOON AS PRACTICAL AFTER ESTABLISHMENT OF UNIFORM GRASS GROWTH OR INSTALLATION OF OTHER PERMANENT STABILIZATION MEASURES. REPAIR ANY DAMAGE TO STABILIZED SURFACES AFTER REMOVAL OF TESC MEASURES.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C107: CONSTRUCTION ROAD/PARKING AREA STABILIZATION
BMP C120: TEMPORARY AND PERMANENT SEEDING
BMP C121: MULCHING
BMP C123: PLASTIC COVERING
BMP C140: DUST CONTROL
BMP C150: MATERIALS ON HAND

ELEMENT #6: PROTECT SLOPES

1. DESIGN, CONSTRUCT, AND PHASE CUT AND FILL SLOPES IN A MANNER THAT WILL MINIMIZE EROSION. APPLICABLE PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, REDUCING CONTINUOUS LENGTH OF SLOPE WITH TERRACING AND DIVERSIONS, REDUCING SLOPE STEEPNESS, AND ROUGHENING SLOPE SURFACES (e.g., TRACK WALKING).
2. OFF-SITE STORMWATER RUN-ON OR GROUNDWATER SHALL BE DIVERTED AWAY FROM SLOPES AND DISTURBED AREAS WITH INTERCEPTOR DIKES, PIPES, AND/OR SWALES. OFF-SITE STORMWATER SHOULD BE MANAGED SEPARATELY FROM STORMWATER GENERATED ON THE SITE.
3. DO NOT CLEAR AND GRUB SLOPES GREATER THAN 4 (HORIZONTAL):1 (VERTICAL) UNLESS FURTHER WORK RESULTING IN STABILIZATION OF THE SLOPES TO BE CLEARED AND GRUBBED IS SCHEDULED.
4. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES, CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS.
5. CHECK DAMS SHALL BE PLACED AT REGULAR INTERVALS WITHIN CONSTRUCTED CHANNELS THAT ARE CUT DOWN A SLOPE.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C120: TEMPORARY AND PERMANENT SEEDING
BMP C150: MATERIALS ON HAND

ELEMENT #7: PROTECT DRAIN INLETS

1. ALL STORM DRAIN INLETS OPERABLE DURING CONSTRUCTION AND ALL INLETS WITHIN 200' DOWNSTREAM OF THE PROJECT SITE SHALL BE PROTECTED WITH CATCH BASIN FILTERS SO THAT STORMWATER RUNOFF DOES NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR TREATED TO REMOVE SEDIMENT. CATCH BASIN FILTERS IN THE ROADWAY WILL BE OIL/SEDIMENT FILTERS AND CATCH BASIN FILTERS OUTSIDE OF THE ROADWAY WILL BE SEDIMENT FILTERS.
2. APPROACH ROADS SHALL BE KEPT CLEAN. SEDIMENT AND STREET WASH WATER SHALL NOT BE ALLOWED TO ENTER STORM DRAINS WITHOUT PRIOR AND ADEQUATE TREATMENT.
3. INLET PROTECTION DEVICES SHOULD BE CLEANED OR REMOVED AND REPLACED WHEN SEDIMENT HAS FILLED ONE-THIRD OF THE AVAILABLE STORAGE (OR WHEN FILLED WITH SIX-INCHES OF SEDIMENT).

BMPs TO BE USED:
BMP C220: STORM DRAIN INLET PROTECTION

ELEMENT #8: STABILIZE CHANNELS AND OUTLETS

1. ALL TEMPORARY ON-SITE CONVEYANCE CHANNELS SHALL BE DESIGNED, CONSTRUCTED AND STABILIZED TO PREVENT EROSION FROM THE EXPECTED PEAK 10 MINUTE VELOCITY OF FLOW FROM A TYPE 1A, 10-YR, 24-HR FREQUENCY STORM FOR THE DEVELOPED CONDITION. ALTERNATIVELY, THE 10-YR, 1-HR FLOW RATE INDICATED BY AN APPROVED CONTINUOUS RUNOFF MODEL, INCREASED BY A FACTOR OF 1.6, MAY BE USED.
2. STABILIZATION, INCLUDING ARMORING MATERIAL, ADEQUATE TO PREVENT EROSION OF OUTLETS, ADJACENT STREAM BANKS, SLOPES, AND DOWNSTREAM REACHES SHALL BE PROVIDED AT THE OUTLETS OF ALL CONVEYANCE SYSTEMS.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C209: OUTLET PROTECTION

ELEMENT #9: CONTROL POLLUTANTS

1. ALL POLLUTANTS, INCLUDING WASTE MATERIALS AND DEMOLITION DEBRIS, THAT OCCUR ONSITE SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.
2. COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS, PETROLEUM PRODUCTS, AND OTHER MATERIALS THAT HAVE THE POTENTIAL TO POSE A THREAT TO HUMAN HEALTH OR THE ENVIRONMENT. ON-SITE FUELING TANKS SHALL INCLUDE SECONDARY CONTAINMENT.
3. MAINTENANCE, FUELING, AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES SHALL BE CONDUCTED USING SPILL PREVENTION AND CONTROL MEASURES. CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY SPILL INCIDENT.
4. WHEEL WASH OR TIRE BATH WASTEWATER SHALL BE DISCHARGED TO A SEPARATE ON-SITE TREATMENT SYSTEM OR TO THE SANITARY SEWER WITH LOCAL SEWER DISTRICT APPROVAL.
5. APPLICATION OF FERTILIZERS AND PESTICIDES, SHALL BE CONDUCTED IN A MANNER AND AT APPLICATION RATES THAT WILL NOT RESULT IN LOSS OF CHEMICAL TO STORMWATER RUNOFF. MANUFACTURERS' LABEL REQUIREMENTS FOR APPLICATION RATES AND PROCEDURES SHALL BE FOLLOWED.
6. BMPs SHALL BE USED TO PREVENT OR TREAT CONTAMINATION OF STORMWATER RUNOFF BY pH MODIFYING SOURCES. THESE SOURCES INCLUDE, BUT ARE NOT LIMITED TO: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHING AND CURING WATERS, WASTE STREAMS GENERATED FROM CONCRETE GRINDING AND SAWING, EXPOSED AGGREGATE PROCESSES, AND CONCRETE PUMPING AND MIXER WASHOUT WATERS. PERMITTEES SHALL ADJUST THE pH OF STORMWATER IF NECESSARY TO PREVENT VIOLATIONS OF WATER QUALITY STANDARDS.
7. PERMITTEES SHALL OBTAIN WRITTEN APPROVAL FROM ECOLOGY PRIOR TO USING CHEMICAL TREATMENT, OTHER THAN CARBON DIOXIDE OR DRY ICE TO ADJUST pH.

SUGGESTED BMPs/BMPs TO BE USED:
BMP C151: CONCRETE HANDLING
BMP C152: SAWCUTTING AND SURFACING POLLUTION PREVENTION
BMP C153: MATERIAL DELIVERY, STORAGE & CONTAINMENT

ELEMENT #10: CONTROL DEWATERING

1. FOUNDATION, VAULT, AND TRENCH DE-WATERING WATER, WHICH HAVE SIMILAR CHARACTERISTICS TO STORMWATER RUNOFF AT THE SITE, SHALL BE DISCHARGED INTO A CONTROLLED CONVEYANCE SYSTEM PRIOR TO DISCHARGE TO A SEDIMENT TRAP OR SEDIMENT POND.

2. CLEAN, NON-TURBID DE-WATERING WATER, SUCH AS WELL-POINT GROUND WATER, CAN BE DISCHARGED TO SYSTEMS TRIBUTARY TO, OR DIRECTLY INTO SURFACE WATERS OF THE STATE, AS SPECIFIED IN ELEMENT #8, PROVIDED THE DE-WATERING FLOW DOES NOT CAUSE EROSION OR FLOODING OF RECEIVING WATERS. CLEAN DE-WATERING WATER SHOULD NOT BE ROUTED THROUGH STORMWATER SEDIMENT PONDS.

3. OTHER DE-WATERING DISPOSAL OPTIONS MAY INCLUDE:
a) INFILTRATION.
b) TRANSPORT OFF SITE IN A VEHICLE, SUCH AS A VACUUM FLUSH TRUCK, FOR LEGAL DISPOSAL IN A MANNER THAT DOES NOT POLLUTE STATE WATERS.
c) ECOLOGY APPROVED ON-SITE CHEMICAL TREATMENT OR OTHER SUITABLE TREATMENT TECHNOLOGIES.
d) SANITARY SEWER DISCHARGE WITH LOCAL SEWER DISTRICT APPROVAL, IF THERE IS NO OTHER OPTION.
e) USE OF A SEDIMENTATION BAG (DIRTBAG OR APPROVED EQUAL) WITH OUTFALL TO A DITCH OR SWALE FOR SMALL VOLUMES OF LOCALIZED DE-WATERING.

4. HIGHLY TURBID CONTAMINATED DEWATERING WATER FROM CONSTRUCTION EQUIPMENT OPERATION, CLAMSHELL DIGGING, CONCRETE TREMIE POUR, OR WORK INSIDE A COFFERDAM SHALL BE HANDLED SEPARATELY FROM STORMWATER.

ELEMENT #11: MAINTAIN BMPs

1. INSPECT EROSION CONTROL DEVICES ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. MAKE NECESSARY REPAIRS AND MAINTENANCE TO ENSURE CONTINUED PERFORMANCE OF EROSION AND SEDIMENT CONTROLS.

2. WHEN SEDIMENT ACCUMULATION IN SEDIMENTATION STRUCTURES, OTHER THAN INLET PROTECTION DEVICES, HAS REACHED A POINT ONE-THIRD DEPTH OF SEDIMENT STRUCTURE OR DEVICE, OR IF FLOW THROUGH THE DEVICE IS REDUCED BY MORE THAN ONE-THIRD CAPACITY, THE CONTRACTOR SHALL REMOVE AND REPLACE DISPOSABLE DEVICES OR CLEAN AND DISPOSE OF SEDIMENT.

3. TEMPORARY EROSION AND SEDIMENT CONTROL BMPs SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE REMOVED OR STABILIZED ON SITE. DISTURBED SOILS SHALL BE PERMANENTLY STABILIZED.

ELEMENT #12: MANAGE THE PROJECT

1. PHASING OF CONSTRUCTION:
a) DEVELOPMENT PROJECTS SHALL BE PHASED WHERE FEASIBLE IN ORDER TO PREVENT, TO THE MAXIMUM EXTENT PRACTICABLE, THE TRANSPORT OF SEDIMENT FROM THE DEVELOPMENT SITE DURING CONSTRUCTION. REVEGETATION OF EXPOSED AREAS AND MAINTENANCE OF THAT VEGETATION SHALL BE AN INTEGRAL PART OF THE CLEARING ACTIVITIES FOR ANY PHASE.
b) CLEARING AND GRADING ACTIVITIES FOR DEVELOPMENTS SHALL BE PERMITTED ONLY IF CONDUCTED PURSUANT TO AN APPROVED SITE DEVELOPMENT PLAN (e.g., SUBDIVISION APPROVAL) THAT ESTABLISHES APPROVED AREAS OF CLEARING, GRADING, CUTTING AND FILLING. WHEN ESTABLISHING THESE PERMITTED CLEARING AND GRADING AREAS, CONSIDERATION SHOULD BE GIVEN TO MINIMIZING REMOVAL OF EXISTING TREES AND MINIMIZING DISTURBANCE AND COMPACTION OF NATIVE SOILS EXCEPT AS NEEDED FOR BUILDING PURPOSES. THESE PERMITTED CLEARING AND GRADING AREAS AND ANY OTHER AREAS REQUIRED TO PRESERVE CRITICAL OR SENSITIVE AREAS, BUFFERS, NATIVE GROWTH PROTECTION EASEMENTS, OR TREE RETENTION AREAS AS MAY BE REQUIRED BY LOCAL JURISDICTIONS, SHALL BE DELINEATED ON THE SITE PLANS AND THE DEVELOPMENT SITE.

2. SEASONAL WORK LIMITATIONS:
FROM OCTOBER 1 THROUGH APRIL 30, CLEARING, GRADING, AND OTHER SOIL DISTURBING ACTIVITIES SHALL ONLY BE PERMITTED IF SHOWN TO THE SATISFACTION OF THE LOCAL PERMITTING AUTHORITY THAT THE TRANSPORT OF SEDIMENT FROM THE CONSTRUCTION SITE TO RECEIVING WATERS WILL BE PREVENTED THROUGH A COMBINATION OF THE FOLLOWING:
a) SITE CONDITIONS INCLUDING EXISTING VEGETATIVE COVERAGE, SLOPE, SOIL TYPE, AND PROXIMITY TO RECEIVING WATERS; AND
b) LIMITATIONS ON ACTIVITIES AND THE EXTEND OF DISTURBED AREAS; AND
c) PROPOSED EROSION AND SEDIMENT CONTROL MEASURES.

BASED ON THE INFORMATION PROVIDED AND LOCAL WEATHER CONDITIONS, THE LOCAL PERMITTING AUTHORITY MAY EXPAND OR RESTRICT THE SEASONAL LIMITATION ON SITE DISTURBANCE. THE LOCAL PERMITTING AUTHORITY SHALL TAKE ENFORCEMENT ACTION – SUCH AS NOTICE OF VIOLATION, ADMINISTRATIVE ORDER, PENALTY, OR STOP-WORK ORDER UNDER THE FOLLOWING CIRCUMSTANCES:
– IF, DURING THE COURSE OF ANY CONSTRUCTION ACTIVITY OR SOIL DISTURBANCE DURING THE SEASONAL LIMITATION PERIOD, SEDIMENT LEAVES THE CONSTRUCTION SITE CAUSING A VIOLATION OF THE SURFACE WATER QUALITY STANDARD; OR
– IF CLEARING AND GRADING LIMITS OR EROSION AND SEDIMENT CONTROLS MEASURES SHOWN IN THE APPROVED PLAN ARE NOT MAINTAINED.

THE FOLLOWING ACTIVITIES ARE EXEMPT FROM THE SEASONAL CLEARING AND GRADING LIMITATIONS:
a) ROUTINE MAINTENANCE AND NECESSARY REPAIR OF EROSION AND SEDIMENT CONTROL BMPs;
b) ROUTINE MAINTENANCE OF PUBLIC FACILITIES OR EXISTING UTILITY STRUCTURES THAT DO NOT EXPOSE THE SOIL OR RESULT IN THE REMOVAL OF THE VEGETATIVE COVER TO SOIL; AND
c) ACTIVITIES WHERE THERE IS ONE HUNDRED PERCENT INFILTRATION OF SURFACE WATER RUNOFF WITHIN THE SITE IN APPROVED AND INSTALLED EROSION AND SEDIMENT CONTROL FACILITIES.

3. COORDINATE WITH UTILITIES AND OTHER CONTRACTORS
THE PRIMARY PROJECT PROPONENT SHALL EVALUATE, WITH INPUT FROM UTILITIES AND OTHER CONTRACTORS, THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE ENTIRE PROJECT, INCLUDING THE UTILITIES, WHEN PREPARING THE CONSTRUCTION SWPPP.

4. INSPECTION AND MONITORING:
a) A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL SHALL BE IDENTIFIED AT THE PRE-CONSTRUCTION MEETING AND SHALL BE ON-SITE OR ON-CALL AT ALL TIMES. EMERGENCY CONTACT INFORMATION SHALL BE KEPT ON-SITE. CERTIFICATION MAY BE THROUGH THE CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL CERTIFICATION PROGRAM OFFERED BY WSDOT, ASSOCIATED GENERAL CONTRACTORS OF WASHINGTON – EDUCATION FOUNDATION, OR ANY EQUIVALENT LOCAL OR NATIONAL CERTIFICATION AND/OR TRAINING PROGRAM.
b) IF INSPECTION AND/OR WATER MONITORING OF SITE RUNOFF REVEALS THAT THE BMPs IDENTIFIED IN THE CONSTRUCTION SWPPP ARE INADEQUATE, THE CONTRACTOR SHALL IMMEDIATELY ADD BMPs TO THE SWPPP AS NECESSARY.

4. THE CONSTRUCTION SWPPP SHALL BE RETAINED ON-SITE. THE CONTRACTOR'S TESC RECORD OF RAINFALL, TESC MEASURES, AND INSPECTION SHALL BECOME PART OF THE SWPPP. THE CONSTRUCTION SWPPP SHALL BE MODIFIED BY THE CONTRACTOR'S TESC RECORD WHENEVER THERE IS A SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF ANY BMP.

NPDES PERMIT REQUIREMENTS

SITE LOG BOOK
A SITE LOG BOOK SHALL CONTAIN A RECORD OF THE IMPLEMENTATION OF THE SWPPP AND OTHER PERMIT REQUIREMENTS INCLUDING THE INSTALLATION AND MAINTENANCE OF BMPs, SITE INSPECTIONS AND STORMWATER MONITORING.

SITE INSPECTIONS
SITE INSPECTIONS SHALL INCLUDE ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, ALL BMPs, AND ALL STORMWATER DISCHARGE POINTS. STORMWATER SHALL BE VISUALLY EXAMINED FOR THE PRESENCE OF SUSPENDED SEDIMENT, TURBIDITY, DISCOLORATION, AND OIL SHEEN. INSPECTORS SHALL EVALUATE THE EFFECTIVENESS OF BMPs AND DETERMINE IF IT IS NECESSARY TO INSTALL, MAINTAIN, OR REPAIR BMPs TO IMPROVE THE QUALITY OF STORMWATER DISCHARGES.

BASED ON THE RESULTS OF THE INSPECTION, THE CONTRACTOR SHALL CORRECT THE PROBLEMS IDENTIFIED AS FOLLOWS:
A. MAKE APPROPRIATE CORRECTION WITHIN 7 DAYS OF TEH INSPECTION; AND
B. FULLY IMPLEMENT AND MAINTAIN APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPs AS SOON AS POSSIBLE, BUT NO LATER THAN 10 DAYS OF TEH INSPECTION; AND
C. DOCUMENT BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK.

SITE INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY CALENDAR WEEK AND WITHIN 24 HOURS OF ANY DISCHARGE FROM THE SITE. THE INSPECTION FREQUENCY FOR TEMPORARILY STABILIZED, INACTIVE SITE MAY BE REDUCED TO ONCE EVERY CALENDAR MONTH.

THE INSPECTOR SHALL SUMMARIZE THE RESULTS OF EACH INSPECTION IN AN INSPECTION REPORT OR CHECKLIST AND BE ENTERED INTO, OR ATTACHED TO, THE SITE LOG BOOK. AT A MINIMUM, EACH INSPECTION REPORT OR CHECKLIST SHALL INCLUDE:
a. INSPECTION DATE AND TIME.
b. WEATHER INFORMATION, GENERAL CONDITIONS DURING INSPECTION AND APPROXIMATE AMOUNT OF PRECIPITATION SINCE THE LAST INSPECTION, AND WITHIN THE LAST 24 HOURS.
c. A SUMMARY OR LIST OF ALL BMPs WHICH HAVE BEEN IMPLEMENTED, INCLUDING OBSERVATIONS OF ALL EROSION/SEDIMENT CONTROL STRUCTURES OR PRACTICES.
d. THE FOLLOWING SHALL BE NOTED:
i. LOCATIONS OF BMPs INSPECTED,
ii. LOCATIONS OF BMPs THAT NEED MAINTENANCE,
iii. THE REASON MAINTENANCE IS NEEDED,
iv. LOCATIONS OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR INTENDED, AND
v. LOCATIONS WHERE ADDITIONAL OR DIFFERENT BMPs ARE NEEDED, AND THE REASON(S) WHY.
e. A DESCRIPTION OF STORMWATER DISCHARGED FROM THE SITE. THE INSPECTOR SHALL NOTE THE PRESENCE OF SUSPENDED SEDIMENT, TURBID WATER, DISCOLORATION, AND/OR OIL SHEEN, AS APPLICABLE.
f. ANY WATER QUALITY MONITORING PERFORMED DURING INSPECTION.
g. GENERAL COMMENTS AND NOTES, INCLUDING A BRIEF DESCRIPTION OF ANY BMP REPAIRS, MAINTENANCE OR INSTALLATION MADE AS A RESULT OF THE INSPECTION.
h.
i. NAME, TITLE, AND SIGNATURE OF TEH PERSON CONDUCTING SITE INSPECTION; AND THE FOLLOWING STATEMENT: "I CERTIFY THAT THIS REPORT IS TRUE, ACCURATE, AND COMPLETE, TO THE BEST OF MY KNOWLEDGE AND BELIEF".

C. TURBIDITY/TRANSPARENCY SAMPLING REQUIREMENTS

1. SAMPLING METHODS/EFFECTIVE DATES
a. BEGINNING OCTOBER 1, 2006, IF CONSTRUCTION ACTIVITY WILL INVOLVE THE DISTURBANCE OF 5 ACRES OR MORE, THE PERMITTEE SHALL CONDUCT TURBIDITY SAMPLING PER CONDITION S4.C.

2. SAMPLING FREQUENCY
a. SAMPLING SHALL BE CONDUCTED AT LEAST ONCE EVERY CALENDAR WEEK, WHEN THERE IS A DISCHARGE OF STORMWATER (OR AUTHORIZED NON-STORMWATER) FROM THE SITE. SAMPLES SHALL BE REPRESENTATIVE OF THE FLOW AND CHARACTERISTICS OF THE DISCHARGE.
b. WHEN THERE IS NO DISCHARGE DURING A CALENDAR WEEK, SAMPLING IS NOT REQUIRED.
c. SAMPLING IS NOT REQUIRED OUTSIDE OF NORMAL WORKING HOURS OR DURING UNSAFE CONDITIONS. IF A PERMITTEE IS UNABLE TO SAMPLE DURING A MONITORING PERIOD, THE DISCHARGE MONITORING REPORT (DMR) SHALL INCLUDE A BRIEF EXPLANATION.

3. SAMPLING LOCATIONS
a. SAMPLING IS REQUIRED AT ALL DISCHARGE POINTS WHERE STORMWATER (OR AUTHORIZED NON-STORMWATER) IS DISCHARGED OFF-SITE.
b. ALL SAMPLING POINT(S) SHALL BE IDENTIFIED ON THE SWPPP SITE MAP AND BE CLEARLY MARKED IN THE FIELD WITH A FLAG, TAPE, STAKE OR OTHER VISIBLE MARKER.

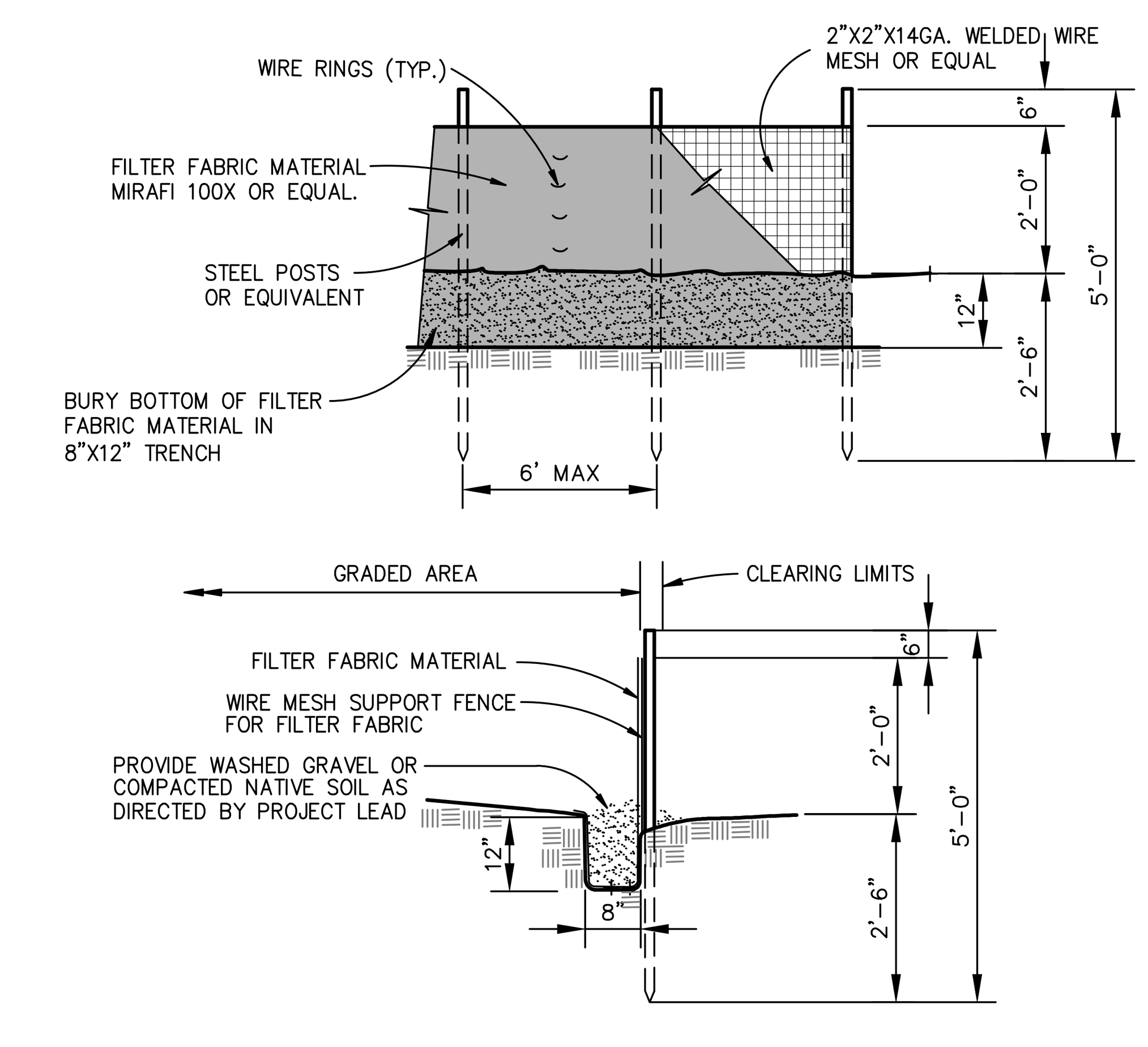
4. SAMPLING AND ANALYSIS METHODS
a. TURBIDITY ANALYSIS SHALL BE PERFORMED WITH A CALIBRATED TURBIDITY METER (TURBIDIMETER), EITHER ON-SITE OR AT AN ACCREDITED LAB. THE RESULTS SHALL BE RECORDED IN THE SITE LOG BOOK IN NEPHELOMETRIC TURBIDITY UNITS (NTU).
b. TRANSPARENCY ANALYSIS SHALL BE PERFORMED ON-SITE WITH A 1 ¾ INCH DIAMETER, 60 CENTIMETER (CM) LONG TRANSPARENCY TUBE. THE RESULTS SHALL BE RECORDED IN THE SITE LOG BOOK IN CENTIMETERS (CM). TRANSPARENCY TUBES ARE AVAILABLE FROM: http://watermonitoringequip.com/pages/stream.html

PARAMETER	UNITS	ANALYTICAL METHOD	SAMPLING FREQUENCY	BENCHMARK VALUE
TURBIDITY	NTU	SM2130 OR EPA 180.1	WEEKLY, IF DISCHARGING	25 NTU
TRANSPARENCY	CM	MANUFACTURER INSTRUCTIONS, OR ECOLOGY GUIDANCE	WEEKLY, IF DISCHARGING	31 CM

5. TURBIDITY/TRANSPARENCY BENCHMARK VALUES
THE BENCHMARK VALUE FOR TURBIDITY IS 25 NTU (NEPHELOMETRIC TURBIDITY UNITS); AND THE BENCHMARK VALUE FOR TRANSPARENCY IS 31 CM.
a. TURBIDITY 26 – 249 NTU, OR TRANSPARENCY 30-7 CM:
IF DISCHARGE TURBIDITY IS GREATER THAN 25 NTU, BUT LESS THAN 250 NTU; OR IF DISCHARGE TRANSPARENCY IS LESS THAN 31 CM, BUT GREATER THAN 6 CM, THE CESCL SHALL:
i. REVIEW THE SWPPP FOR COMPLIANCE WITH CONDITION S9 AND MAKE APPROPRIATE REVISIONS WITHIN 7 DAYS OF THE DISCHARGE THAT EXCEEDED THE BENCHMARK; AND
II. FULLY IMPLEMENT AND MAINTAIN APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPs AS SOON AS POSSIBLE, BUT WITHIN 10 DAYS OF THE DISCHARGE THAT EXCEEDED THE BENCHMARK; AND
III. DOCUMENT BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK.

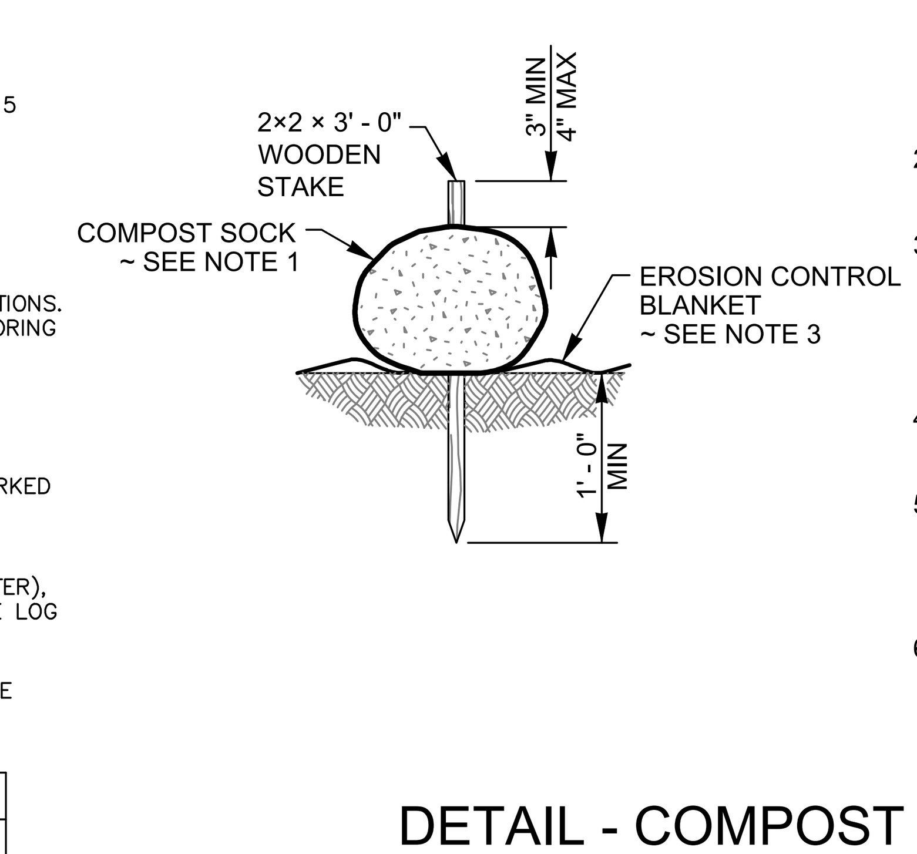
b. TURBIDITY 250 NTU OR GREATER, OR TRANSPARENCY 6 CM OR LESS:
IF DISCHARGE IS GREATER THAN OR EQUAL TO 250 NTU; OR IF DISCHARGE TRANSPARENCY IS LESS THAN OR EQUAL TO 6 CM, THE CESCL SHALL:
i. NOTIFY ECOLOGY BY PHONE IN ACCORDANCE WITH CONDITION S5.A.; AND
ii. REVIEW THE SWPPP FOR COMPLIANCE WITH CONDITION S9 AND MAKE APPROPRIATE REVISIONS WITHIN 7 DAYS OF THE DISCHARGE THAT EXCEEDED THE BENCHMARK; AND
iii. FULLY IMPLEMENT AND MAINTAIN APPROPRIATE SOURCE CONTROL AND/OR TREATMENT BMPs AS SOON AS POSSIBLE, BUT WITHIN 10 DAYS OF DISCHARGE THAT EXCEEDED THE BENCHMARK;
iv. DOCUMENT BMP IMPLEMENTATION AND MAINTENANCE IN THE SITE LOG BOOK; AND
v. CONTINUE TO SAMPLE DISCHARGES DAILY UNTIL:
1. TURBIDITY IS 25 NTU (OR LOWER); OR
2. TRANSPARENCY IS 31 CM OR (OR GREATER); OR
3. THE CESCL HAS DEMONSTRATED COMPLIANCE WITH THE WATER QUALITY STANDARD FOR TURBIDITY:
a .NO MORE THAN 5 NTU OVER BACKGROUND TURBIDITY, IF BACKGROUND IS LESS THAN 50 NTU, OR
b.NO MORE THAN 10 % OVER BACKGROUND TURBIDITY, IF BACKGROUND IS 50 NTU OR GREATER; OR
4. THE DISCHARGE STOPS OR IS ELIMINATED

NOTE: ALL SECTIONS REFERENCED IN THE SAMPLING REQUIREMENTS CAN BE LOCATED IN THE NPDES PERMIT.



DETAIL - FILTER FABRIC SILT FENCE

NOT TO SCALE



NOTES

1. Compost Sock shall be in accordance with Standard Specification 9-14.5(6). Compost Sock shall be a minimum of 8" in diameter or sized to suit conditions as specified by the Engineer or Contract.
2. Compost material to be dispersed on site, as determined by the Engineer.
3. When placing Compost Sock on slopes, use Erosion Control Blanket if specified by the Engineer and in accordance with Standard Specification 9-14.5(2). See Standard Plan I-60.10.
4. Always install Compost Sock perpendicular to slope and along contour lines.
5. Remove sediment from the up slope side of the Compost Sock when accumulation has reached 1/2 of the effective height of the Compost Sock.
6. Live stakes can be used in addition to wooden stakes and shall be in accordance with Standard Specification 9-14.6(1). See plans for species selection and spacing.

DETAIL - COMPOST SOCK

REF: WSDOT STD PLAN I-30.40-00
NOT TO SCALE

cfd 05/22/18 9:12am – P:\K\KMBY00000010\0400CAD\SHEETS\EC\Recycle Removal Plans\ecFG003KMBY00000010.dwg

TESC / SWPPP NOTES

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: NONE

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
ecFG003KMBY00000010

SHEET NO.
3
OF 7

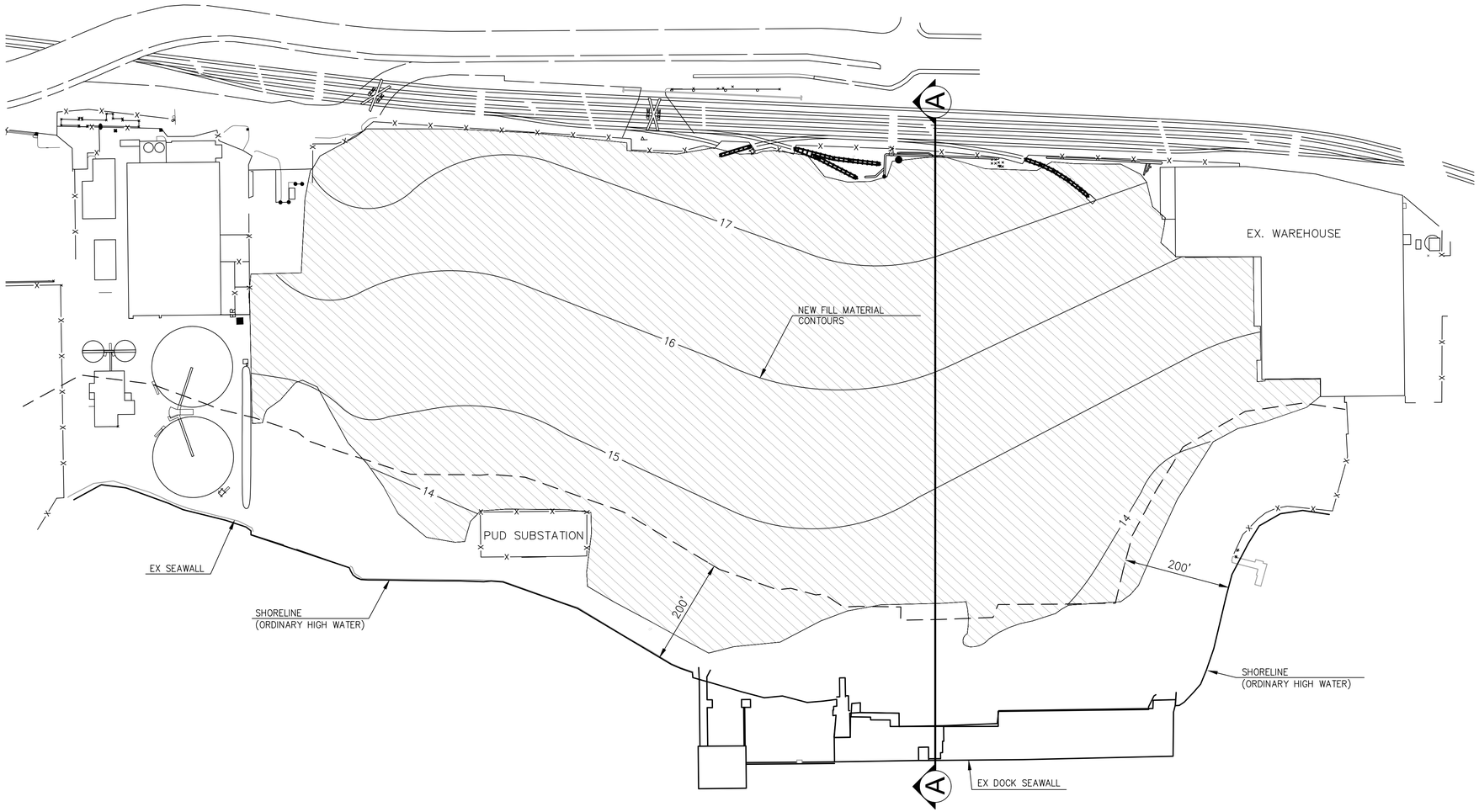
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

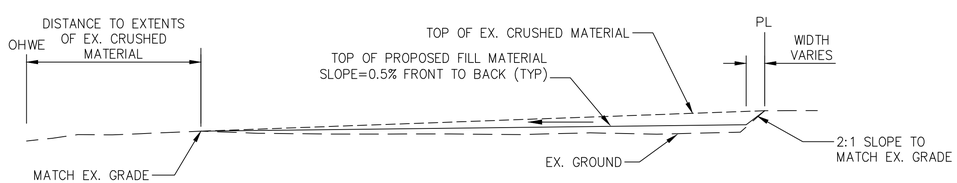
NORTH

0 60 120 240

SCALE: 1"=120'

CALL
2 BUSINESS DAYS
BEFORE YOU DIG
FOR UTILITY LOCATE
811





SECTION A-A
NO SCALE

DEVELOPMENT DATA:

APPLICANT: KIMBERLY-CLARK WORLDWIDE INC
2600 FEDERAL AVE.
EVERETT, WASHINGTON 98201
425.210.3284
ATTENTION: BRYAN LUST, PROJECT ENGINEER

ENGINEER/PLANNER
SURVEYOR: DAVID EVANS and ASSOCIATES, INC.
1620 W. MARINE VIEW DR. SUITE 200
EVERETT, WASHINGTON 98201
425.259.4099
ATTENTION: JOHN SMITH, P.E.

APPROXIMATE QUANTITIES

REMOVAL

CRUSHED MATERIAL – 115,000 TO 130,000 CY

EARTHWORK

NEW MATERIAL:
45,000 TO 55,000 CY (IMPORT)

FILL MATERIAL AREA

SITE CONDITIONS AFTER REMOVAL

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
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SHEET NO.
4
OF 7

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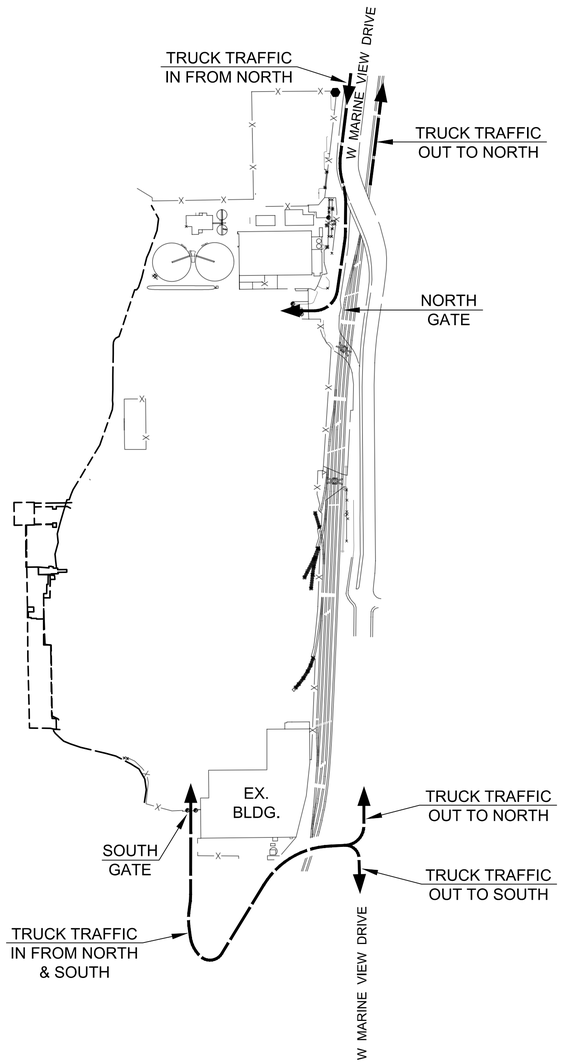
A PORTION OF THE SW QUARTER OF SECTION 19, T 29 N, R 5 E, WM

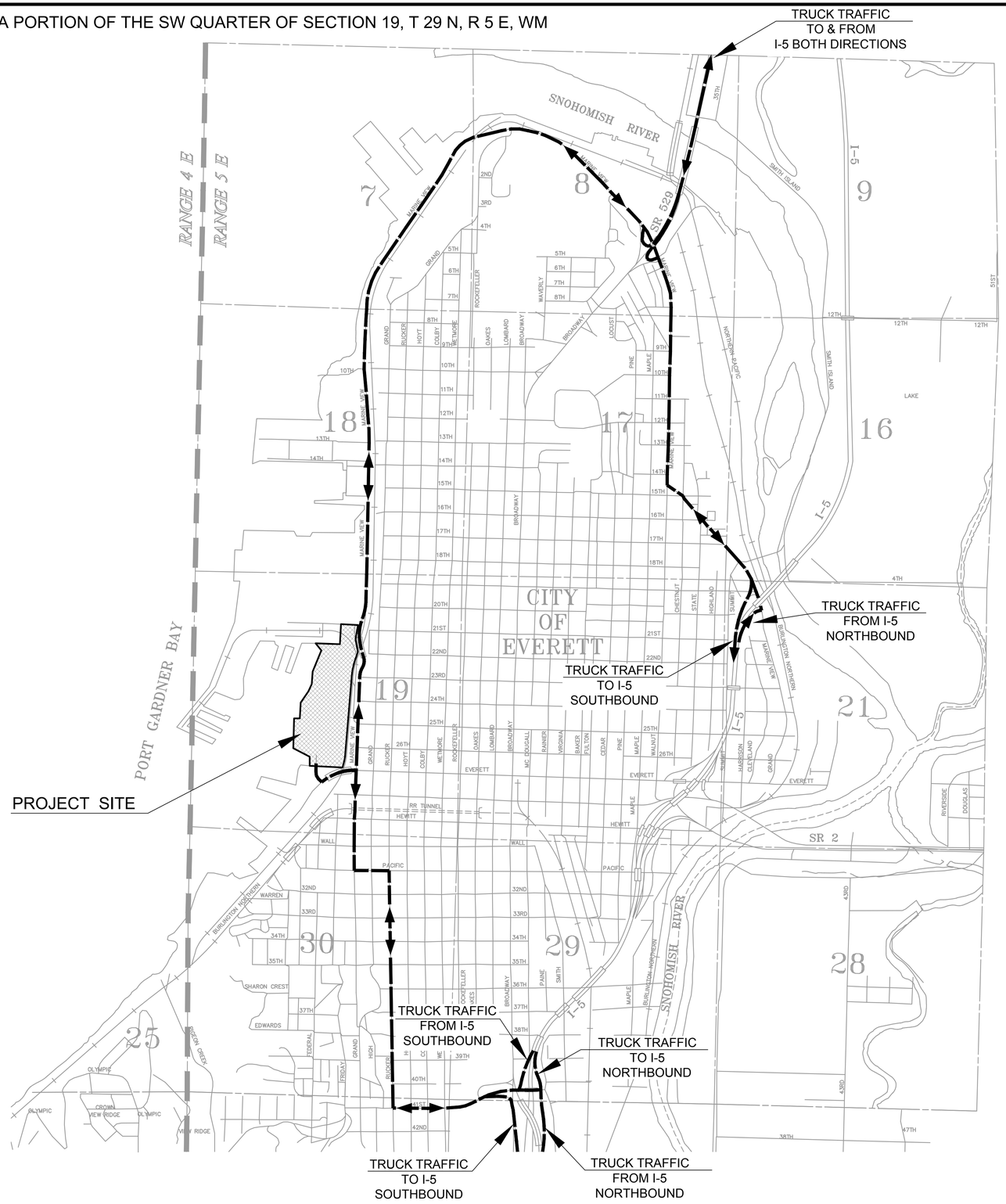
CONSTRUCTION NOTES

1. IT IS ANTICIPATED THAT THE TOTAL DAILY TRUCK TRIPS WILL BE APPROXIMATELY 4 TO 6 TRUCKS/HR

NORTH
0 150 300 600



SITE HAUL PLAN
SCALE: 1"=300'



TRUCK HAUL ROUTES
SCALE: 1"=1200'

NORTH
0 600 1200 2400

HAUL ROUTE EXHIBIT

KIMBERLY-CLARK EVERETT PLANT BUILDING DEMOLITION

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
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REVISION NUMBER:

SCALE: AS NOTED

PROJECT NUMBER:
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OF 7

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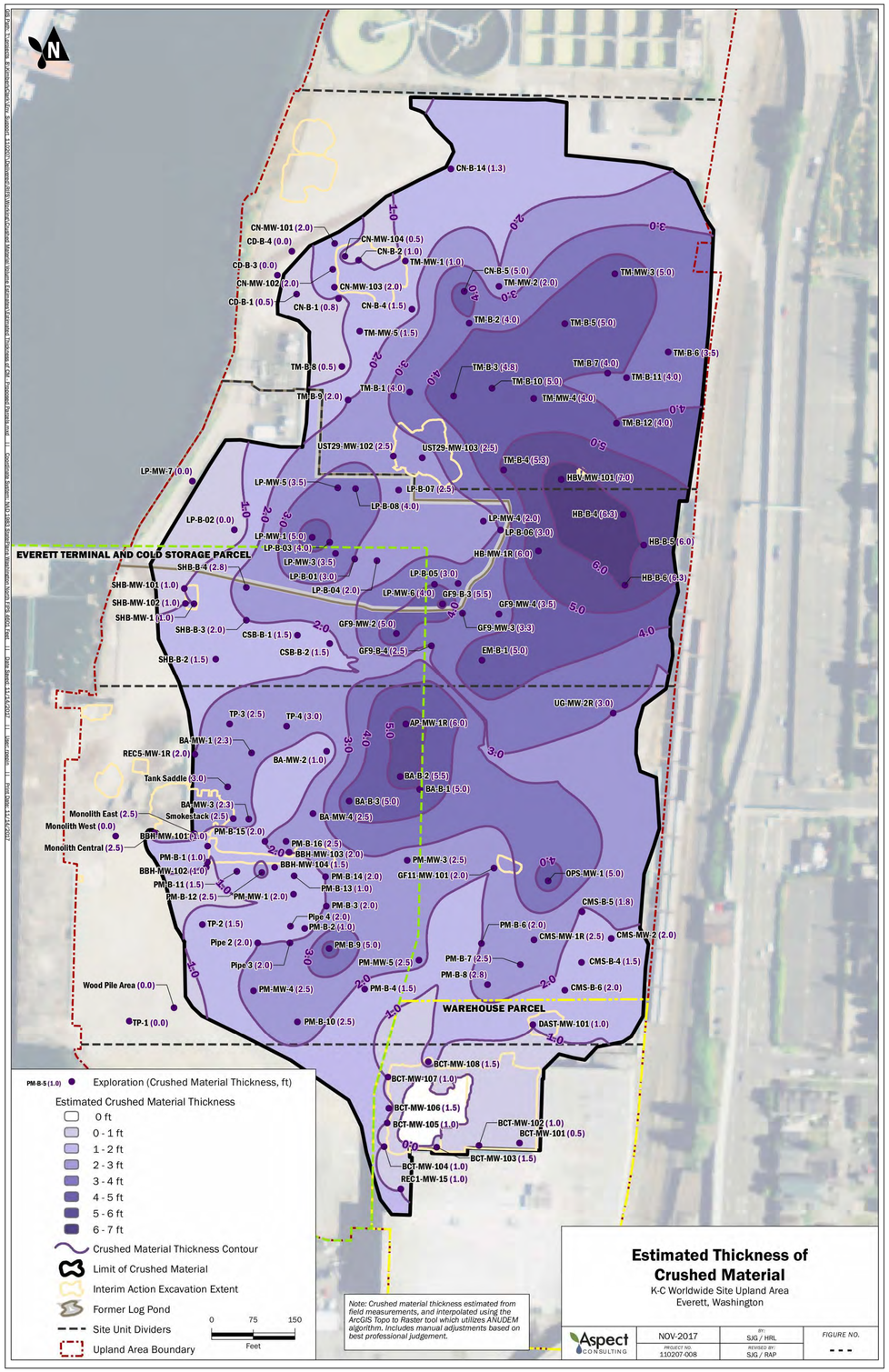

Estimated Thickness of Crushed Material

K-C Worldwide Site Upland Area
Everett, Washington

Aspect Consulting	NOV-2017	SJG / HRL	FIGURE NO.
	PROJECT NO. 110207-008	REVISED BY: SJG / RAP	---

NORTH
0 600 1200 2400

CRUSHED MATERIAL THICKNESS EXHIBIT

KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: AS NOTED

PROJECT NUMBER: KMBY00000010

DRAWING FILE: ecFG005KMBY00000010

SHEET NO. 6 OF 7

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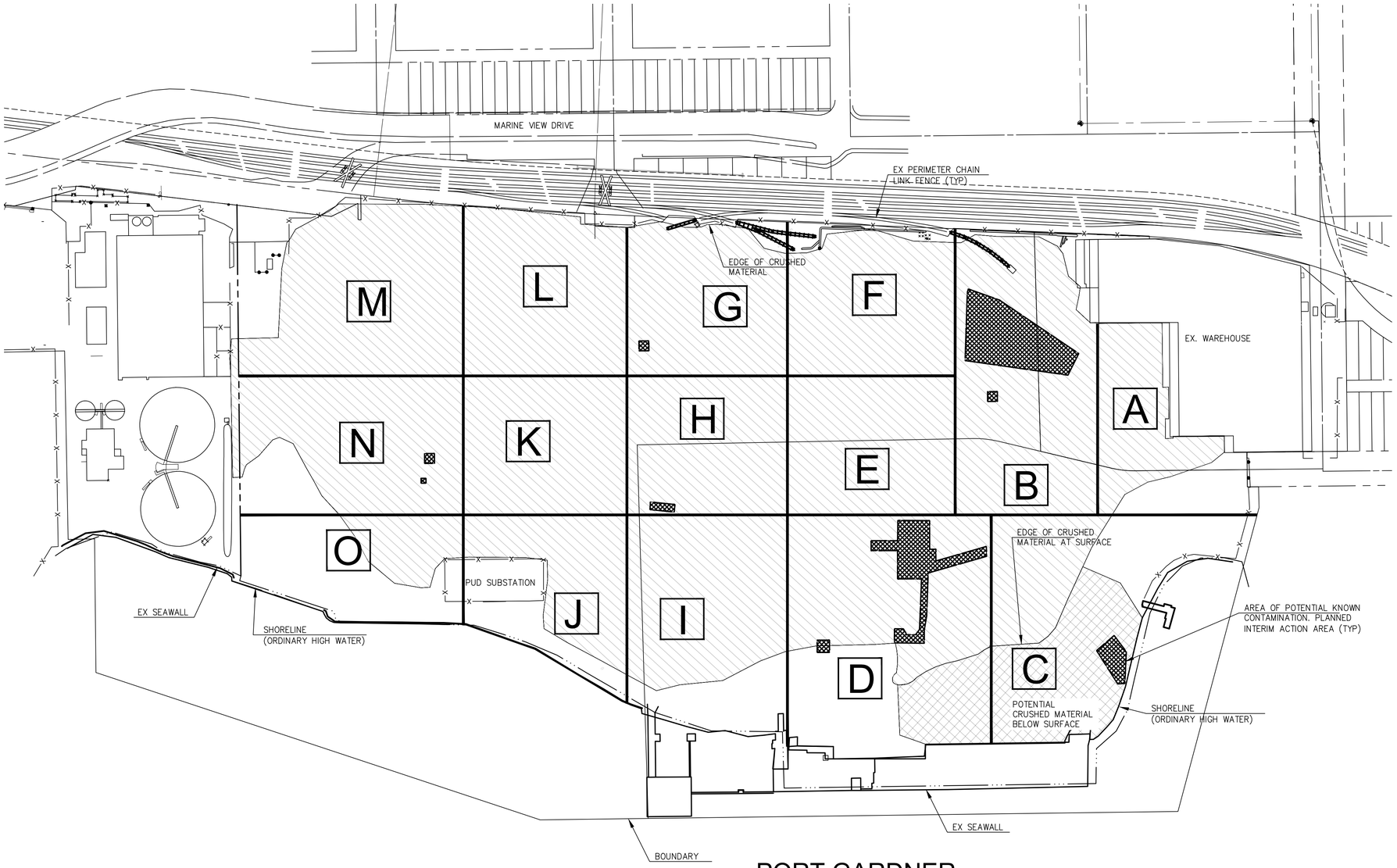

EXCAVATION SEQUENCING AREAS
KIMBERLY-CLARK MILL SITE
CRUSHED MATERIAL REMOVAL PROJECT

KIMBERLY-CLARK WORLDWIDE INC
EVERETT, WASHINGTON

DAVID EVANS AND ASSOCIATES INC.
1620 W. Marine View Drive, Suite 200
Everett Washington 98201
Phone: 425.259.4099

REVISIONS: APPD.

DATE: MAY, 2018
DESIGN: JNS
DRAWN: CD
CHECKED: JNS
REVISION NUMBER:

SCALE: 1"=120'

PROJECT NUMBER:
KMBY00000010

DRAWING FILE:
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SHEET NO.
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OF 7

CALL
2 BUSINESS DAYS
BEFORE YOU DIG
FOR UTILITY LOCATE
811

cd: 06/28/18 11:29am – P:\K\KMBY00000010\0400C40\SHEETS\ECS\Recycle Removal Plans\ecFG007KMBY00000010.dwg

Appendix B

Alternative BMPs and BMP Details

The following includes a list of possible alternative BMPs for each of the 12 elements not described in the main SWPPP text. This list can be referenced in the event a BMP for a specific element is not functioning as designed and an alternative BMP needs to be implemented.

Element #1 - Mark Clearing Limits

Buffer Zones (BMP C102)
High Visibility Plastic or Metal Fence (BMP C103)
Stake and Wire Fence (BMP C104)
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #2 - Establish Construction Access

Stabilized Construction Entrance (BMP C105)
Wheel Wash (BMP C106)
Construction Road/Parking Area Stabilization (BMP C107)
Water Bars (BMP C203)
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #3 - Control Flow Rates

Sediment Trap (BMP C240)
Temporary Sediment Pond (BMP C241)
Detention Pond
Infiltration Trench
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #4 - Install Sediment Controls

Straw Bale Barrier (BMP C230)
Brush Barrier (BMP C231)
Gravel Filter Berm (BMP C232)
Silt Fence (BMP C233)
Vegetated Strip (BMP C234)
Straw Wattles (BMP C235)
Sediment Trap (BMP C240)
Storm Drain Inlet Protection (BMP C 220)
Portable Water Storage Tanks (e.g., Baker Tank) for Sedimentation
Materials on Hand (BMP C150)
Detention Pond or Vault
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)
Temporary Sediment Pond (BMP C241) (See instructions)
Construction Stormwater Filtration (BMP C251) (See instructions)
Construction Stormwater Chemical Treatment (BMP C250) (See instructions)

Element #5 - Stabilize Soils

Temporary and Permanent Seeding (BMP C120)
Mulching (BMP C121)
Nets and Blankets (BMP C122)
Plastic Covering (BMP C 123)
Sodding (BMP C124)
Topsoiling (BMP C125)
Polyacrylamide for Soil Erosion Protection (BMP C126)
Surface Roughening (BMP C130)
Gradient Terraces (BMP C131)
Dust Control (BMP C140)
Small Project Construction Stormwater Pollution (BMP 180)
Early application of gravel base on areas to be paved
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #6 - Protect Slopes

Temporary and Permanent Seeding (BMP C120)
Surface Roughening (BMP C130)
Gradient Terraces (BMP C131)
Interceptor Dike and Swale (BMP C200)
Grass-Lined Channels (BMP C201)
Channel Lining (BMP C202)
Pipe Slope Drains (BMP C204
Subsurface Drains (BMP C205)
Level Spreader (BMP C206)
Check Dams (BMP C207)
Triangular Silt Dike (Geotextile-Encased Check Dam; BMP C208)
Straw Wattles (BMP C235)
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #7 – Protect Drain Inlets

Drop Inlet Protection

- Excavated Drop Inlet Protection
- Block and Gravel Drop Inlet Protection
- Gravel and Wire Drop Inlet Protection
- Catch Basin Filters
- Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Curb Inlet Protection

- Wooden Weir
- Block and Gravel Curb Inlet Protection
- Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Culvert Inlet Protection

Culvert Inlet Sediment Trap
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #8 - Stabilize Channels and Outlets

Grass-Lined Channels (BMP C201)
Channel Lining (BMP C202)
Level Spreader (BMP C206)
Check Dams (BMP C207)
Triangular Silt Dike (Geotextile-Encased Check Dam; BMP C208)
Outlet Protection (BMP C209)
Materials on Hand (BMP C150)
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Element #10 - Control Dewatering

Concrete Handling (BMP C151)
Temporary Sediment Pond (BMP C241)
Construction Stormwater Filtration (BMP C251)
Construction Stormwater Chemical Treatment (BMP C250)
Infiltration
Use of a sedimentation bag, with outfall to a ditch or swale for small volumes of localized dewatering.
Alternative BMP not included in the SWMMWW (2005) or SWNNEW (2004)

Appendix D

Site Inspection Forms

The results of each inspection shall be summarized in an inspection report or checklist that is entered into or attached to the site log book. It is suggested that the inspection report or checklist be included in this appendix to keep monitoring and inspection information in one document, but this is optional. However, it is mandatory that this SWPPP and the site inspection forms be kept onsite at all times during construction, and that inspections be performed and documented as outlined below.

At a minimum, each inspection report or checklist shall include:

a. Inspection date/times

b. Weather information: general conditions during inspection, approximate amount of precipitation since the last inspection, and approximate amount of precipitation within the last 24 hours.

c. A summary or list of all BMPs that have been implemented, including observations of all erosion/sediment control structures or practices.

d. The following shall be noted:

i. locations of BMPs inspected,

ii. locations of BMPs that need maintenance,

iii. the reason maintenance is needed,

iv. locations of BMPs that failed to operate as designed or intended, and

v. locations where additional or different BMPs are needed, and the reason(s) why

e. A description of stormwater discharged from the site. The presence of suspended sediment, turbid water, discoloration, and/or oil sheen shall be noted, as applicable.

f. A description of any water quality monitoring performed during inspection, and the results of that monitoring.

g. General comments and notes, including a brief description of any BMP repairs, maintenance or installations made as a result of the inspection.

h. A statement that, in the judgment of the person conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and the NPDES permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the

remedial actions required to bring the site back into compliance, as well as a schedule of implementation.

i. Name, title, and signature of person conducting the site inspection; and the following statement: “I certify under penalty of law that this report is true, accurate, and complete, to the best of my knowledge and belief”.

When the site inspection indicates that the site is not in compliance with any terms and conditions of the NPDES permit, the Permittee shall take immediate action(s) to: stop, contain, and clean up the unauthorized discharges, or otherwise stop the noncompliance; correct the problem(s); implement appropriate Best Management Practices (BMPs), and/or conduct maintenance of existing BMPs; and achieve compliance with all applicable standards and permit conditions. In addition, if the noncompliance causes a threat to human health or the environment, the Permittee shall comply with the Noncompliance Notification requirements in Special Condition S5.F of the permit.

Appendix E

Construction Stormwater General Permit (CSWGP)

Issuance Date: November 18, 2015
Effective Date: January 1, 2016
Expiration Date: December 31, 2020

Modification Issuance Date: March 22, 2017
Modification Effective Date: May 5, 2017

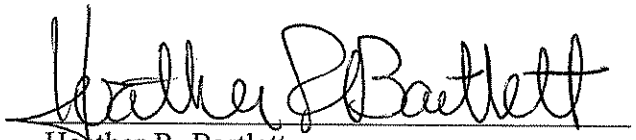
CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for Stormwater Discharges Associated with Construction Activity

State of Washington
Department of Ecology
Olympia, Washington 98504

In compliance with the provisions of
Chapter 90.48 Revised Code of Washington
(State of Washington Water Pollution Control Act)
and
Title 33 United States Code, Section 1251 et seq.
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified, or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge in accordance with the special and general conditions that follow.



Heather R. Bartlett
Water Quality Program Manager
Washington State Department of Ecology

TABLE OF CONTENTS

LIST OF TABLES

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

Table 1: Summary of Required Submittals

Permit Section	Submittal	Frequency	First Submittal Date
S5.A and S8	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
S5.B	Discharge Monitoring Report	Monthly*	Within 15 days following the end of each month
S5.F and S8	Noncompliance Notification – Telephone Notification	As necessary	Within 24-hours
S5.F	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
S9.C	Request for Chemical Treatment Form	As necessary	Written approval from Ecology is required prior to using chemical treatment (with the exception of dry ice or CO_2 to adjust pH)
G2	Notice of Change in Authorization	As necessary	
G6	Permit Application for Substantive Changes to the Discharge	As necessary	
G8	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
G9	Notice of Permit Transfer	As necessary	
G20	Notice of Planned Changes	As necessary	
G22	Reporting Anticipated Non-compliance	As necessary	

SPECIAL NOTE: *Permittees must submit electronic Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

Table 2: Summary of Required On-site Documentation

Document Title	Permit Conditions
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S9, S5

SPECIAL CONDITIONS

S1. PERMIT COVERAGE

A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal operators and Indian Country as specified in Special Condition S1.E.3.

B. Operators Required to Seek Coverage Under this General Permit:

1. Operators of the following construction activities are required to seek coverage under this CSWGP:

   a. Clearing, grading and/or excavation that results in the disturbance of one or more acres (including off-site disturbance acreage authorized in S1.C.2) and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.

      i. This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and

   b. Any size construction activity discharging stormwater to waters of the State that the Washington State Department of Ecology (Ecology):

      i. Determines to be a significant contributor of pollutants to waters of the State of Washington.

      ii. Reasonably expects to cause a violation of any water quality standard.

2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b. above):

   a. Construction activities that discharge all stormwater and non-stormwater to ground water, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.

   b. Construction activities covered under an Erosivity Waiver (Special Condition S2.C).

   c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

C. Authorized Discharges:

1. *Stormwater Associated with Construction Activity.* Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.)

2. *Stormwater Associated with Construction Support Activity*. This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:

    a. The support activity relates directly to the permitted construction site that is required to have an NPDES permit; and

    b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and

    c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.

3. *Non-Stormwater Discharges*. The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:

    a. Discharges from fire-fighting activities.

    b. Fire hydrant system flushing.

    c. Potable water, including uncontaminated water line flushing.

    d. Hydrostatic test water.

    e. Uncontaminated air conditioning or compressor condensate.

    f. Uncontaminated ground water or spring water.

    g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).

    h. Uncontaminated discharges from foundation or footing drains.

    i. Uncontaminated or potable water used to control dust. Permittees must minimize the amount of dust control water used.

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

    k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special Condition S3.

At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

D. Prohibited Discharges:

The following discharges to waters of the State, including ground water, are prohibited.

1. Concrete wastewater.
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.2 (see Appendix A of this permit).
4. Slurry materials and waste from shaft drilling, including process wastewater from shaft drilling for construction of building, road, and bridge foundations unless managed according to Special Condition S9.D.9.j.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless managed according to Special Condition S9.D.9.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

E. Limits on Coverage

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal operator.

4. Stormwater from facilities located on "Indian Country" as defined in 18 U.S.C.§1151, except portions of the Puyallup Reservation as noted below.

   Indian Country includes:

   a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.

   b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

   c. All off-reservation federal trust lands held for Native American Tribes.

      Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.

6. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

S2. APPLICATION REQUIREMENTS

A. Permit Application Forms

1. Notice of Intent Form/Timeline

   a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.

   b. Operators must apply using the electronic application form (NOI) available on Ecology's website http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

      Department of Ecology
      Water Quality Program - Construction Stormwater
      PO Box 47696
      Olympia, Washington 98504-7696

c. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it on or before the date of the first public notice (see Special Condition S2.B below for details). The 30-day public comment period begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, based on public comments, or any other relevant factors, coverage under the general permit will automatically commence on the thirty-first day following receipt by Ecology of a completed NOI, or the issuance date of this permit, whichever is later; unless Ecology specifies a later date in writing as required by WAC173-226-200(2).

d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 ("demonstrably equivalent" BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, it must provide notice of the selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.

e. Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an updated NOI. Examples of such changes include, but are not limited to:

    i. Changes to the Permittee's mailing address,

    ii. Changes to the on-site contact person information, ***and***

    iii. Changes to the area/acreage affected by construction activity.

f. Applicants must notify Ecology if they are aware of contaminated soils and/or groundwater associated with the construction activity. Provide detailed information with the NOI (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment BMPs proposed to control the discharge of soil and/or groundwater contaminants in stormwater. Examples of such detail may include, but are not limited to:

    i. List or table of all known contaminants with laboratory test results showing concentration and depth,

    ii. Map with sample locations,

    iii. Temporary Erosion and Sediment Control (TESC) plans,

    iv. Related portions of the Stormwater Pollution Prevention Plan (SWPPP) that address the management of contaminated and potentially contaminated construction stormwater and dewatering water,

    v. Dewatering plan and/or dewatering contingency plan.

2. Transfer of Coverage Form

   The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided the Permittee submits a Transfer of Coverage Form in accordance with General Condition G9. Transfers do not require public notice.

B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must contain:

1. A statement that "The applicant is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit".

2. The name, address and location of the construction site.

3. The name and address of the applicant.

4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the number of acres to be disturbed.

5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system.

6. The statement: "Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology's action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, PO Box 47696, Olympia, Washington 98504-7696 Attn: Water Quality Program, Construction Stormwater."

C. Erosivity Waiver

Construction site operators may qualify for an erosivity waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than 5 acres and the site is not a portion of a common plan of development or sale that will disturb 5 acres or greater.

2. Calculation of Erosivity "R" Factor and Regional Timeframe:

   a. The project's rainfall erosivity factor ("R" Factor) must be less than 5 during the period of construction activity, as calculated (see the CSWGP homepage http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html for a link to the EPA's calculator and step by step instructions on computing the "R" Factor in the EPA Erosivity Waiver Fact Sheet). The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:

   b. The entire period of construction activity must fall within the following timeframes:

      i. For sites west of the Cascades Crest: June 15 – September 15.

      ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.

      iii. For sites east of the Cascades Crest, within the Central Basin: no additional timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Average Annual Precipitation Region 2), refer to http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html.

3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:

   a. Comply with applicable local stormwater requirements; ***and***

   b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.

4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b. or for any size construction activity that could reasonably expect to cause a violation of any water quality standard as defined in Special Condition S1.B.1.b.ii.

5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.

6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:

    a. Recalculate the rainfall erosivity "R" factor using the original start date and a new projected ending date and, if the "R" factor is still under 5 *and* the entire project falls within the applicable regional timeframe in Special Condition S2.C.2.b, complete and submit an amended waiver certification form before the original waiver expires; ***or***

    b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

S3. COMPLIANCE WITH STANDARDS

A. Discharges must not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges not in compliance with these standards are not authorized.

B. Prior to the discharge of stormwater and non-stormwater to waters of the State, the Permittee must apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.

C. Ecology presumes that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:

    1. Comply with all permit conditions, including planning, sampling, monitoring, reporting, and recordkeeping conditions.

    2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater technical manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the Phase I Municipal Stormwater Permit are approved by Ecology.)

D. Where construction sites also discharge to ground water, the ground water discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to ground water through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

S4. MONITORING REQUIREMENTS, BENCHMARKS AND REPORTING TRIGGERS

A. Site Log Book

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

B. Site Inspections

The Permittee's site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points under the Permittee's operational control. (See Special Conditions S4.B.3 and B.4 below for detailed requirements of the Permittee's Certified Erosion and Sediment Control Lead [CESCL].)

Construction sites one acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a certified CESCL. Sites less than one acre may have a person without CESCL certification conduct inspections.

1. The Permittee must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. The Permittee must evaluate the effectiveness of BMPs and determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

   Based on the results of the inspection, the Permittee must correct the problems identified by:

   a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.

   b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.

   c. Documenting BMP implementation and maintenance in the site log book.

2. The Permittee must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one inspection is required that week.) The Permittee may reduce the inspection frequency for temporarily stabilized, inactive sites to once every calendar month.

3. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:

    a. Site conditions and construction activities that could impact the quality of stormwater, ***and***

    b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges.

4. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the manual referred to in Special Condition S9.C.1 and 2).

5. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:

    a. Inspection date and time.

    b. Weather information, the general conditions during inspection and the approximate amount of precipitation since the last inspection, and precipitation within the last 24 hours.

    c. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.

    d. A description of the locations:

        i. Of BMPs inspected;

        ii. Of BMPs that need maintenance and why;

        iii. Of BMPs that failed to operate as designed or intended; ***and***

        iv. Where additional or different BMPs are needed, and why.

    e. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

    f. Any water quality monitoring performed during inspection.

    g. General comments and notes, including a brief description of any BMP repairs, maintenance or installations made following the inspection.

    h. A summary report and a schedule of implementation of the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.

i. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement: "I certify that this report is true, accurate, and complete to the best of my knowledge and belief."

Table 3: Summary of Primary Monitoring Requirements

Size of Soil Disturbance[1]	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling[2]	CESCL Required for Inspections?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method[3]		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required[4]	Required	Yes

[1] Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

[2] If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of poured concrete or recycled concrete over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH sampling in accordance with Special Condition S4.D.

[3] Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.

[4] Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.

C. Turbidity/Transparency Sampling Requirements

1. Sampling Methods

   a. If construction activity involves the disturbance of 5 acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.

   b. If construction activity involves 1 acre or more but fewer than 5 acres of soil disturbance, the Permittee must conduct either transparency sampling **or** turbidity sampling per Special Condition S4.C.

2. Sampling Frequency

   a. The Permittee must sample all discharge points at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site); sampling is not required on sites that disturb less than an acre.

   b. Samples must be representative of the flow and characteristics of the discharge.

   c. Sampling is not required when there is no discharge during a calendar week.

   d. Sampling is not required outside of normal working hours or during unsafe conditions.

   e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).

   f. Sampling is not required before construction activity begins.

   g. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.

3. Sampling Locations

   a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).

   b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.

   c. The Permittee must identify all sampling point(s) on the SWPPP site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.

   d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.

e. The Permittee may discontinue sampling at discharge points in areas of the project where the Permittee no longer has operational control of the construction activity.

4. Sampling and Analysis Methods

a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTUs).

b. The Permittee performs transparency analysis on site with a 1¾-inch-diameter, 60-centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm).

Table 4: Monitoring and Reporting Requirements

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value	Phone Reporting Trigger Value
Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs	250 NTUs
Transparency	cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm	6 cm

5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTUs or less. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information.

a. Turbidity 26 – 249 NTUs, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTUs; or if discharge transparency is less than 33 cm, but equal to or greater than 6 cm, the Permittee must:

i. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.

iii. Document BMP implementation and maintenance in the site log book.

b. Turbidity 250 NTUs or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTUs or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive management process described below.

i. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) number (or through Ecology's Water Quality Permitting Portal [WQWebPortal] – Permit Submittals when the form is available) within 24 hours, in accordance with Special Condition S5.A.

- **Central Region** (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490
- **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
- **Northwest Region** (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
- **Southwest Region** (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

Links to these numbers and the ERTS reporting page are located on the following web site: http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html.

ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.

iii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.

iv. Document BMP implementation and maintenance in the site log book.

v. Sample discharges daily until:

a) Turbidity is 25 NTUs (or lower); ***or***

b) Transparency is 33 cm (or greater); ***or***

c) The Permittee has demonstrated compliance with the water quality limit for turbidity:

1) No more than 5 NTUs over background turbidity, if background is less than 50 NTUs, ***or***

2) No more than 10% over background turbidity, if background is 50 NTUs or greater; ***or***

d) The discharge stops or is eliminated.

D. pH Sampling Requirements – Significant Concrete Work or Engineered Soils

If construction activity results in the disturbance of 1 acre or more, ***and*** involves significant concrete work (significant concrete work means greater than 1000 cubic yards poured concrete or recycled concrete used over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer system that drains to surface waters of the State, the Permittee must conduct pH sampling as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. For sites with significant concrete work, the Permittee must begin the pH sampling period when the concrete is first poured and exposed to precipitation, and continue weekly throughout and after the concrete pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).

2. For sites with recycled concrete where monitoring is required, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and must continue until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5 (su).

3. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.

4. During the applicable pH monitoring period defined above, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.

5. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.

6. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:

a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters; ***or***

b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO_2) sparging or dry ice. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO_2 sparging or dry ice.

7. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH sampling results in the site log book.

S5. REPORTING AND RECORDKEEPING REQUIREMENTS

A. High Turbidity Reporting

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTUs or more (or transparency less than or equal to 6 cm) high turbidity reporting level, the Permittee must either call the applicable Ecology Region's Environmental Report Tracking System (ERTS) number by phone within 24 hours of analysis or submit an electronic ERTS report (or submit an electronic report through Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals when the form is available). See the CSWGP web site for links to ERTS and the WQWebPortal: http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html. Also, see phone numbers in Special Condition S4.C.5.b.i.

B. Discharge Monitoring Reports (DMRs)

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G13 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WQWebDMR web application accessed through Ecology's Water Quality Permitting Portal. To find out more information and to sign up for WQWebDMR go to: http://www.ecy.wa.gov/programs/wq/permits/paris/portal.html.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

Permittees who obtain a waiver not to use WQWebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees shall

submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with "no discharge" entered in place of the monitoring results. DMRs are required for the full duration of permit coverage (from issuance date to termination). For more information, contact Ecology staff using information provided at the following web site: www.ecy.wa.gov/programs/wq/permits/paris/contacts.html.

C. Records Retention

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, copy of the permit coverage letter (including Transfer of Coverage documentation), and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of three years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this permit. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

D. Recording Results

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

E. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

F. Noncompliance Notification

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment (such as but not limited to spills of fuels or other materials, catastrophic pond or slope failure, and discharges that violate water quality standards), or exceed

numeric effluent limitations (see S8. Discharges to 303(d) or TMDL Waterbodies), the Permittee must, upon becoming aware of the circumstance:

1. Notify Ecology within 24-hours of the failure to comply by calling the applicable Regional office ERTS phone number (refer to Special Condition S4.C.5.b.i. or www.ecy.wa.gov/programs/wq/stormwater/construction/turbidity.html for Regional ERTS phone numbers).

2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation.

3. Submit a detailed written report to Ecology within five (5) days, of the time the Permittee becomes aware of the circumstances, unless requested earlier by Ecology. The report must be submitted using Ecology's Water Quality Permitting Portal (WQWebPortal) - Permit Submittals, unless a waiver from electronic reporting has been granted according to S5.B. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

   The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6).

   Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification is received by Ecology within 24 hours.

G. Access to Plans and Records

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:

   a. General Permit

   b. Permit Coverage Letter

   c. Stormwater Pollution Prevention Plan (SWPPP)

   d. Site Log Book

2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:

a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.

b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:

   i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; ***or***

   ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; ***or***

   iii. Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

S6. PERMIT FEES

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

S7. SOLID AND LIQUID WASTE DISPOSAL

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

A. Special Condition S3, Compliance with Standards

B. WAC 173-216-110

C. Other applicable regulations

S8. DISCHARGES TO 303(d) OR TMDL WATERBODIES

A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-listed Waterbodies

1. Permittees who discharge to segments of waterbodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.

2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2016, or the date when the operator's complete permit application is received by Ecology, whichever is later.

B. Limits on Coverage for New Discharges to TMDL or 303(d)-listed Waters

Operators of construction sites that discharge to a TMDL or 303(d)-listed waterbody are not eligible for coverage under this permit *unless* the operator:

1. Prevents exposing stormwater to pollutants for which the waterbody is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; ***or***

2. Documents that the pollutants for which the waterbody is impaired are not present at the site, and retains documentation of this finding within the SWPPP; ***or***

3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:

   a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; ***or***

   b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

   Operators of construction sites are eligible for coverage under this permit if Ecology issues permit coverage based upon an affirmative determination that the *discharge will not cause or contribute to the existing impairment.*

C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.

2. As an alternative to the 25 NTUs effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), Permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs. In order to use the water quality standard requirement, the sampling must take place at the following locations:

   a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.

   b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.

3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.

4. Permittees whose discharges exceed the numeric effluent limit shall sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

Table 5: Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit[1]
• Turbidity • Fine Sediment • Phosphorus	Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs, at the point where stormwater is discharged from the site; OR In compliance with the surface water quality standard for turbidity (S8.C.2.a)

[1]Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

D. Discharges to Water Bodies on the 303(d) List for High pH

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

Table 6: pH Sampling and Limits for 303(d)-Listed Waters

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

2. At the Permittee's discretion, compliance with the limit shall be assessed at one of the following locations:

   a. Directly in the 303(d)-listed waterbody segment, inside the immediate area of influence of the discharge; or

   b. Alternatively, the Permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.

3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.

4. Permittees whose discharges exceed the numeric effluent limit shall sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or Another Pollution Control Plan

1. Discharges to a waterbody that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html for more information on TMDLs.

   a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.

      i. The Permittee must sample discharges weekly or as otherwise specified by the TMDL to evaluate compliance with the specific waste load allocations or requirements.

      ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.

   b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements,

compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.

c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.

d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

2. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus that is completed and approved by EPA before January 1, 2016, or before the date the operator's complete permit application is received by Ecology, whichever is later. TMDLs completed after the operator's complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.

S9. STORMWATER POLLUTION PREVENTION PLAN

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

A. The Permittee's SWPPP must meet the following objectives:

1. To implement best management practices (BMPs) to prevent erosion and sedimentation, and to identify, reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.

2. To prevent violations of surface water quality, ground water quality, or sediment management standards.

3. To control peak volumetric flow rates and velocities of stormwater discharges.

B. General Requirements

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:

a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).

b. Potential erosion problem areas.

c. The 13 elements of a SWPPP in Special Condition S9.D.1-13, including BMPs used to address each element.

d. Construction phasing/sequence and general BMP implementation schedule.

e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.

f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the SWPPP. Engineering calculations do not need to be included in the SWPPP for treatment systems that do not require such calculations.

2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:

   a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.

   b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.

   c. Document BMP implementation and maintenance in the site log book.

   The Permittee must modify the SWPPP 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 waters of the State.

C. Stormwater Best Management Practices (BMPs)

BMPs must be consistent with:

1. Stormwater Management Manual for Western Washington (most current approved edition at the time this permit was issued), for sites west of the crest of the Cascade Mountains; ***or***

2. Stormwater Management Manual for Eastern Washington (most current approved edition at the time this permit was issued), for sites east of the crest of the Cascade Mountains; ***or***

3. Revisions to the manuals listed in Special Condition S9.C.1. & 2., or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; ***or***

4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable Stormwater Management Manuals, including:

    a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.

    b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

D. SWPPP – Narrative Contents and Requirements

The Permittee must include each of the 13 elements below in Special Condition S9.D.1-13 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits

    a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.

    b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.

2. Establish Construction Access

    a. Limit construction vehicle access and exit to one route, if possible.

    b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.

    c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.

    d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.

    e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.

3. Control Flow Rates

    a. Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the

velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.

b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvements (for example, impervious surfaces).

c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from siltation during the construction phase.

4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must design, install and maintain such controls to:

a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.

b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.

d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.

e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.

f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

5. Stabilize Soils

a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide

(PAM), the early application of gravel base on areas to be paved, and dust control.

b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.

c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.

d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion:

West of the Cascade Mountains Crest
During the dry season (May 1 - September 30): 7 days
During the wet season (October 1 - April 30): 2 days

East of the Cascade Mountains Crest, except for Central Basin*
During the dry season (July 1 - September 30): 10 days
During the wet season (October 1 - June 30): 5 days

The Central Basin*, East of the Cascade Mountains Crest
During the dry season (July 1 - September 30): 30 days
During the wet season (October 1 - June 30): 15 days

*Note: The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.

f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

g. The Permittee must minimize the amount of soil exposed during construction activity.

h. The Permittee must minimize the disturbance of steep slopes.

i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

6. Protect Slopes

a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).

b. The Permittee must divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.

c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.

   i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."

   ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.

d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.

e. Place check dams at regular intervals within constructed channels that are cut down a slope.

7. Protect Drain Inlets

   a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.

   b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).

8. Stabilize Channels and Outlets

   a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:

      i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land

cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."

ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.

b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.

b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.

c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.

d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.

e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.

f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete

pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A--Definitions.)

g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.

h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete truck drums or concrete handling equipment onto the ground, or into storm drains, open ditches, streets, or streams. Washout of concrete handling equipment may be disposed of in a designated concrete washout area or in a formed area awating concrete where it will not contaminate surface or ground water. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is prohibited. Do not wash out to formed areas awaiting LID facilities.

i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO_2 or dry ice used to adjust pH.

j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

10. Control Dewatering

a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, into a controlled conveyance system before discharge to a sediment trap or sediment pond.

b. Permittees may discharge clean, non-turbid dewatering water, such as well-point ground water, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that “surface waters of the State” may exist on a construction site as well as off site; for example, a creek running through a site.

c. Other dewatering treatment or disposal options may include:

i. Infiltration.

ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.

iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (see S9.D.9.i. regarding chemical treatment written approval).

iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.

v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.

d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

11. Maintain BMPs

a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.

b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

12. Manage the Project

a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.

b. Inspection and monitoring – Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.

c. Maintaining an updated construction SWPPP – Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4 and S9.

13. Protect Low Impact Development (LID) BMPs

The primary purpose of LID BMPs/On-site LID Stormwater Management BMPs is to reduce the disruption of the natural site hydrology. LID BMPs are permanent facilities.

a. Permittees must protect all Bioretention and Rain Garden facilities from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the facilities to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden Bioretention/Rain Garden soils, and replacing the removed soils with soils meeting the design specification.

b. Permittees must maintain the infiltration capabilities of Bioretention and Rain Garden facilities by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.

c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements.

d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.

e. Permittees must keep all heavy equipment off existing soils under LID facilities that have been excavated to final grade to retain the infiltration rate of the soils.

E. SWPPP – Map Contents and Requirements

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions:

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.
3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.

10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.

11. Location or proposed location of LID facilities.

S10. NOTICE OF TERMINATION

A. The site is eligible for termination of coverage when it has met any of the following conditions:

1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; ***or***

2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per General Condition G9), and the Permittee no longer has operational control of the construction activity; ***or***

3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.

B. When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology
Water Quality Program – Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

When an electronic termination form is available, the Permittee may choose to submit a complete and accurate Notice of Termination (NOT) form through the Water Quality Permitting Portal rather than mailing a hardcopy as noted above.

The termination is effective on the thirty-first calendar day following the date Ecology receives a complete NOT form, unless Ecology notifies the Permittee that the termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees are required to comply with all conditions and effluent limitations in the permit until the permit has been terminated.

Permittees transferring the property to a new property owner or operator/Permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

GENERAL CONDITIONS

G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

G2. SIGNATORY REQUIREMENTS

A. All permit applications must bear a certification of correctness to be signed:

1. In the case of corporations, by a responsible corporate officer;
2. In the case of a partnership, by a general partner of a partnership;
3. In the case of sole proprietorship, by the proprietor; ***or***
4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

B. All reports required by this permit and other information requested by Ecology (including NOIs, NOTs, and Transfer of Coverage forms) must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section must make the following 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G3. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.

B. To have access to and copy – at reasonable times and at reasonable cost – any records required to be kept under the terms and conditions of this permit.

C. To inspect – at reasonable times – any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor – at reasonable times – any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G4. GENERAL PERMIT MODIFICATION AND REVOCATION

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

A. When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.

B. When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.

C. When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, ***or***

D. When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

G5. REVOCATION OF COVERAGE UNDER THE PERMIT

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

A. Violation of any term or condition of this permit.

B. Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.

C. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.

D. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

E. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.

F. Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

G. Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

G6. REPORTING A CAUSE FOR MODIFICATION

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G8. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. The Permittee must reapply using the electronic application form (NOI) available on Ecology's website. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology
Water Quality Program - Construction Stormwater
PO Box 47696
Olympia, Washington 98504-7696

G9. TRANSFER OF GENERAL PERMIT COVERAGE

Coverage under this general permit is automatically transferred to a new discharger, including operators of lots/parcels within a common plan of development or sale, if:

A. A written agreement (Transfer of Coverage Form) between the current discharger (Permittee) and new discharger, signed by both parties and containing a specific date for transfer of permit responsibility, coverage, and liability (including any Administrative Orders associated with the Permit) is submitted to the Director; and

B. The Director does not notify the current discharger and new discharger of the Director's intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also submit an updated application form (NOI) to the Director indicating the remaining permitted acreage after the transfer.

G10. REMOVED SUBSTANCES

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G15. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than $20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

G20. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

A. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).

B. A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: for sites 5 acres or larger, a 20% or greater increase in acreage disturbed by construction activity.

C. A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.

D. A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G21. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

G22. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate

unavoidable interruption of operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G23. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

G24. APPEALS

A. The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.

B. The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.

C. The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

G25. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

G26. BYPASS PROHIBITED

A. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for

stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.

2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

   c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.

4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

   The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

   a. A description of the bypass and its cause.

   b. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.

   c. A cost-effectiveness analysis of alternatives including comparative resource damage assessment.

   d. The minimum and maximum duration of bypass under each alternative.

   e. A recommendation as to the preferred alternative for conducting the bypass.

f. The projected date of bypass initiation.

g. A statement of compliance with SEPA.

h. A request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.

i. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

   Ecology will consider the following before issuing an administrative order for this type bypass:

   a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.

   b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

   c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

   After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

B. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

APPENDIX A – DEFINITIONS

AKART is an acronym for "all known, available, and reasonable methods of prevention, control, and treatment." AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the *pollutants* and controlling pollution associated with a discharge.

Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2016, or before the date the operator's complete permit application is received by Ecology, whichever is later.

Applicant means an *operator* seeking coverage under this permit.

Benchmark means a *pollutant* concentration used as a permit threshold, below which a *pollutant* is considered unlikely to cause a water quality violation, and above which it may. When *pollutant* concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not water quality standards and are not numeric effluent limitations; they are indicator values.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: *stormwater* associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Buffer means an area designated by a local *jurisdiction* that is contiguous to and intended to protect a sensitive area.

Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

Calendar Day A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

Calendar Week (same as **Week**) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

Certified Erosion and Sediment Control Lead (CESCL) means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (see BMP C160 in the SWMM).

Chemical Treatment means the addition of chemicals to *stormwater* and/or authorized non-stormwater prior to filtration and discharge to surface waters.

Clean Water Act (CWA) means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

Combined Sewer means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

Common Plan of Development or Sale means a site where multiple separate and distinct *construction activities* may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

Composite Sample means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots.

Concrete Wastewater means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When *stormwater* comingles with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to *waters of the State*, including *ground water*.

Construction Activity means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land. Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, site preparation, soil compaction, movement and stockpiling of topsoils, and demolition activity.

Contaminant means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "*hazardous substance*" and WAC 173-340-200.

Contaminated Groundwater means groundwater which contains *contaminants*, *pollutants*, or *hazardous substances* that do not occur naturally or occur at levels greater than natural background.

Contaminated Soil means soil which contains *contaminants*, *pollutants*, or *hazardous substances* that do not occur naturally or occur at levels greater than natural background.

Demonstrably Equivalent means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.

2. The *pollutant* removal performance expected from the BMPs selected.
3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

Department means the Washington State Department of Ecology.

Detention means the temporary storage of *stormwater* to improve quality and/or to reduce the mass flow rate of discharge.

Dewatering means the act of pumping *ground water* or *stormwater* away from an active construction site.

Director means the Director of the Washington State Department of Ecology or his/her authorized representative.

Discharger means an owner or *operator* of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

Domestic Wastewater means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such ground water infiltration or surface waters as may be present.

Ecology means the Washington State Department of Ecology.

Engineered Soils means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

Equivalent BMPs means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to *surface water* or to *ground water* than BMPs selected from the SWMM.

Erosion means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

Erosion and Sediment Control BMPs means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

Federal Operator is an entity that meets the definition of "*Operator*" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of

the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

Final Stabilization (same as **fully stabilized** or **full stabilization**) means the establishment of a permanent vegetative cover, or equivalent permanent stabilization measures (examples of permanent non-vegetative stabilization methods include, but are not limited to riprap, gabions or geotextiles) which prevents erosion.

Ground Water means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

Hazardous Substance means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(10) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

Injection Well means a well that is used for the subsurface emplacement of fluids. (See Well.)

Jurisdiction means a political unit such as a city, town or county; incorporated for local self-government.

National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of *pollutants* to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

Notice of Intent (NOI) means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

Notice of Termination (NOT) means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

Operator means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Permittee means individual or entity that receives notice of coverage under this general permit.

pH means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

pH Monitoring Period means the time period in which the pH of *stormwater* runoff from a site must be tested a minimum of once every seven days to determine if *stormwater* pH is between 6.5 and 8.5.

Point Source means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which *pollutants* are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See Fact Sheet for further explanation.)

Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

Pollution means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any *waters of the State* as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

Process Wastewater means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If *stormwater* commingles with process wastewater, the commingled water is considered process wastewater.

Receiving Water means the waterbody at the point of discharge. If the discharge is to a *storm sewer system*, either surface or subsurface, the receiving water is the waterbody to which the storm system discharges. Systems designed primarily for other purposes such as for ground water drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey *stormwater* are considered the receiving water.

Representative means a *stormwater* or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate *composite sample*, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

Responsible Corporate Officer for the purpose of signatory authority means: (i) 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, or (ii) the manager of one or more manufacturing, production, 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 (40 CFR 122.22).

Sanitary Sewer means a sewer which is designed to convey domestic wastewater.

Sediment means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

Sedimentation means the depositing or formation of sediment.

Sensitive Area means a waterbody, wetland, stream, aquifer recharge area, or channel migration zone.

SEPA (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

Significant Amount means an amount of a *pollutant* in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a *pollutant* that has a reasonable potential to cause a violation of surface or ground water quality or sediment management standards.

Significant Concrete Work means greater than 1000 cubic yards poured concrete or recycled concrete used over the life of a project.

Significant Contributor of Pollutants means a facility determined by Ecology to be a contributor of a significant amount(s) of a *pollutant*(s) to waters of the State of Washington.

Site means the land or water area where any "facility or activity" is physically located or conducted.

Source Control BMPs means physical, structural or mechanical devices or facilities that are intended to prevent *pollutants* from entering *stormwater*. A few examples of source control

BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the *sanitary sewer* or a dead end sump.

Stabilization means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

Storm Drain means any drain which drains directly into a *storm sewer system*, usually found along roadways or in parking lots.

Storm Sewer System means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying *stormwater*. This does not include systems which are part of a *combined sewer* or Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Stormwater means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

Stormwater Management Manual (SWMM) or **Manual** means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat *pollutants* in *stormwater*.

Stormwater Pollution Prevention Plan (SWPPP) means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of *stormwater*.

Surface Waters of the State includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the State of Washington.

Temporary Stabilization means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent "*final stabilization*."

Total Maximum Daily Load (TMDL) means a calculation of the maximum amount of a *pollutant* that a waterbody can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single *pollutant* from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the *pollutant*. The calculation must also account for seasonable variation in water quality.

Transfer of Coverage (TOC) means a request for transfer of coverage under this general permit as specified by General Condition G9 of this permit.

Treatment BMPs means BMPs that are intended to remove *pollutants* from *stormwater*. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

Transparency means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a "turbidity tube."

Turbidity means the clarity of water expressed as nephelometric turbidity units (NTUs) and measured with a calibrated turbidimeter.

Uncontaminated means free from any contaminant. See definition of "*contaminant*" and WAC 173-340-200.

Waste Load Allocation (WLA) means the portion of a receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

Water-only Based Shaft Drilling is a shaft drilling process that uses water only and no additives are involved in the drilling of shafts for construction of building, road, or bridge foundations.

Water quality means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

Waters of the State includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

Well means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See Injection well.)

Wheel Wash Wastewater means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When *stormwater* comingles with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

APPENDIX B – ACRONYMS

AKART	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
BMP	Best Management Practice
CESCL	Certified Erosion and Sediment Control Lead
CFR	Code of Federal Regulations
CKD	Cement Kiln Dust
cm	Centimeters
CTB	Cement-Treated Base
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EPA	Environmental Protection Agency
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
FR	Federal Register
LID	Low Impact Development
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Unit
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SWMM	Stormwater Management Manual
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
UIC	Underground Injection Control
USC	United States Code
USEPA	United States Environmental Protection Agency
WAC	Washington Administrative Code
WQ	Water Quality
WWHM	Western Washington Hydrology Model

Appendix F

303(d) List Waterbodies / TMDL Waterbodies Information

DEPARTMENT OF ECOLOGY
State of Washington

Construction Stormwater General Permit
Proposed New Discharge to an Impaired Waterbody

Part 1. Site Information

1a. Site or Project Name:		
1b. Site Address or Location Description:	City:	County:
1c. Impaired Water Body:		
1d. Impairment Pollutant(s):		

Part 2. Discharge Certification

Ecology will not grant coverage under the Construction Stormwater General Permit for new discharges to an impaired (303(d)-listed) water body if the discharge will cause or contribute to a violation of water quality standards. For Ecology to determine whether permit coverage is appropriate, the site operator (Permittee) must select one of the three options below, complete this form, and ***provide the required documentation to Ecology.***

Select the one option below that most clearly applies to your site. ***Additionally, submit the relevant portions of the SWPPP (Stormwater Pollution Prevention Plan) that support the chosen option.*** If you have not yet developed the SWPPP, submit relevant documentation to be included in the SWPPP to justify the chosen option.

Go to www.ecology.wa.gov/constructionstormwaterpermit to download the SWPPP template.

☐ 2a. The pollutant(s) for which the water body is impaired is/are not present on the site. Documentation of this finding is contained within the SWPPP. (If the water body is impaired for more than one pollutant, check this box only if NONE of the impairment pollutants are present on site).

☐ 2b. Stormwater will not be exposed to the pollutant(s) for which the water body is impaired, and the SWPPP details procedures taken to prevent exposure on site. (This statement must be true for all pollutants for which the water body is impaired. If any impairment pollutant does not meet 2a or 2b, you must complete 2c).

☐ 2c. You do not expect the discharge to cause or contribute to an exceedance of a water quality standard. Provide Ecology with data to support this statement, and retain such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrates one of the following:

i. For discharges to waters without an EPA-approved or established TMDL (water cleanup plan), the discharge of the impairment pollutant(s) will meet in-stream water quality criteria at the point of discharge to the water body.

ii. For discharges to waters with an EPA-approved or established TMDL, there is sufficient remaining wasteload allocation in the TMDL to allow the construction stormwater discharge and that existing dischargers to the water body are subject to compliance schedules designed to bring the water body into attainment with water quality standards.

**If none of the options above apply to your site, your site will not be eligible for coverage under the permit.*

(Cont'd on the following page)

Part 3. Signature

3a. "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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those 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."

_____ / _____ .

Printed Name / Company (Operator/Permittee only) Title

_____ _____ .

Signature of Operator/Permittee* Date

* Signature of Operator/Permittee requirements:

A. For a corporation: by a responsible corporate officer.
B. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
C. For a municipality, state, federal, or other public facility: by either a principal executive officer or ranking elected official.

Please sign and return this ORIGINAL document to the following address:

Department of Ecology
Attn: Water Quality Program, Construction Stormwater
PO Box 47696
Olympia, WA 98504-7696

If you have questions, please call:

Location	Contact Name	Phone	E-mail
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla Walla, Whatcom, and Whitman counties	Shawn Hopkins	360-407-6442	shawn.hopkins@ecy.wa.gov
Island, King (except Seattle), and San Juan counties	RaChelle Stane	360-407-6556	rachelle.stane@ecy.wa.gov
City of Seattle and Kitsap, Pierce, and Thurston counties	Josh Klimek	360-407-7451	josh.klimek@ecy.wa.gov
Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties	Joyce Smith	360-407-6858	joyce.smith@ecy.wa.gov

To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TYY at 877-833-6341.

Directions for Completing the Impaired (303(d)-List) Water Body New Discharger Form

Part 1

1a and 1b: Provide site information. This site information must be identical to the information provided on your notice of intent application form to obtain coverage under the Construction Stormwater General Permit.

1c: Write the name of the 303(d)-listed (also called *Category 5*) water body segment(s) to which your site drains or discharges into.

1d: List all pollutants (for example, temperature, fecal coliform, bacteria, etc.) for which the Category 5 water body is impaired. See the following website for information on TMDLs: www.ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process.

Part 2

If your site may discharge to a 303(d)-listed (Category 5) water body segment, you are required to select one of the three options (2a, 2b, or 2c) most appropriate to your site's situation in order to be eligible for coverage under the permit. (Please note that the examples below are NOT specific to the pollutants used in the examples. Any impairment pollutant may apply to any of the three options.)

Option 2a: Choose this option if the pollutant(s) of concern is not present on site. ***You will need to attach additional documents to fully meet the submittal requirements of this option (a copy or excerpt from the SWPPP, a brief narrative of pollution control methods, sampling data, etc.).***

For example:

- *The water body segment is impaired for fecal coliform bacteria, but there is no known source of fecal coliform bacteria (waste from animals or humans) contamination on the site.*
- *The water body is impaired for temperature, but due to site characteristics (soils, vegetation, drainage, etc.) and time of year that discharges are most likely to occur (Oct-April), there will not be a source of warm water that would cause an increase in the receiving water temperature.*
- *The water body sediments are impaired for PCBs and dioxin, but there are no known sources of these pollutants on the site.*

Option 2b: Choose this option when the pollutant(s) of concern is on site but stormwater will not come in contact with this pollutant.

For example:

- *The water body segment is impaired for phosphorus, high pH and low dissolved oxygen. Soil on the site contains phosphorus that may contribute to excessive plant growth, which in turn may cause high pH and low dissolved oxygen levels in water bodies. The SWPPP contains detailed plans to cover all exposed soils (with plastic sheets, straw mulch, etc.) to prevent stormwater from conveying soil/sediment (and the attached phosphorus) into the water body. Soil stabilization and revegetation will not include the use of phosphorus-containing fertilizers, compost or other products that could cause excess phosphorus or other nutrients to be discharged. In addition, sediment control measures (traps, ponds, silt fence, waddles, etc.) will be installed and maintained to ensure that sediment laden stormwater is not discharged during the construction activity.*
- *The water body sediment is impaired for total petroleum hydrocarbons (constituents of gasoline, diesel, oil and other petroleum-based products), but the SWPPP contains measures to ensure that all petroleum products (for example, fuel, lubricants) used during construction are covered and contained to prevent the discharge of petroleum hydrocarbons into the receiving water.*
- *The water body is impaired for dioxin, and the site's groundwater contains dioxin. However, the dioxin-contaminated groundwater will be pumped into tanks for off-site disposal and treatment, while preventing the groundwater (and dioxin) from co-mingling with stormwater.*

Option 2c: Choose this option when the pollutant(s) of concern is on site, will be exposed to stormwater, and will be discharged off site. You will need to document, in advance, how the pollutant will be controlled, minimized, and discharged to meet the in-stream water quality criteria for the water body. ***You will need to attach additional documents to fully meet the submittal requirements of this option (a copy or excerpt from the SWPPP, a brief narrative of pollution control methods, sampling data, etc.).***

For example:

- *The receiving water body is impaired for turbidity and fine sediments. Mandatory BMPs (Best Management Practices) and erosion-control practices put in place by the permit will appropriately minimize the turbidity of the stormwater discharges. Additionally, retention ponds will allow for suspended solids to settle out before stormwater is discharged.*

The permit conditions of **2c.i** apply for discharges to water bodies without a TMDL and require providing data and other technical information to demonstrate that the discharge will not cause or contribute to a violation of the water quality standards at the point of discharge. This would typically involve pre-construction water quality sampling, or other site-specific investigation(s). You should contact Ecology to discuss the development of an appropriate sampling and/or site characterization plan. This option should only be pursued if Options 2a or 2b are not applicable to your site.

The permit conditions of **2c.ii** would only apply if your site discharges to a water body segment with an EPA-approved or EPA-established TMDL. If that is the case, contact your Ecology permit administrator – this person will help you determine whether there is sufficient remaining wasteload allocation to allow additional construction stormwater discharges and the existing discharges are subject to compliance schedules to bring the water body into compliance with the water quality standards.

Definitions

***303(d) List*:** The term "303(d) list" is the list of impaired and threatened waters (stream/river segments, lakes, etc.) that the Clean Water Act requires all states to submit for EPA approval every two years in even-numbered years. The states identify all waters where required pollution controls are not sufficient to attain or maintain applicable water quality standards, and establish priorities for development of "total maximum daily loads," or TMDLs (water cleanup plans), based on the severity of the pollution and the sensitivity of the uses to be made of the waters, among other factors (40C.F.R. §130.7(b)(4)). States then provide a long-term plan for completing TMDLs within 8 to 13 years from first listing.

***Impaired (303(d)-Listed) Water Body*:** Water bodies that do not meet water quality standards and are listed on the 303(d) list (see 303(d) List).

SWPPP: Stormwater pollution prevention plan. The Permittee's SWPPP is required to be maintained and updated on site, and must support the site operator's efforts to implement best management practices (BMPs) to prevent erosion and sedimentation and to identify, reduce, eliminate or prevent stormwater contamination and water pollution from construction activity; to prevent violations of surface water quality, ground water quality, or sediment management standards; and to control peak volumetric flow rates and velocities of stormwater discharges. The SWPPP must include a narrative and drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. (All BMPs must be clearly referenced in the narrative and marked on the drawings.)

TMDL: The TMDL (Total Maximum Daily Load or water cleanup plan) calculates the maximum amount of a pollutant allowed to enter a water body so that the water body will meet water quality standards for that particular pollutant. www.ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Total-Maximum-Daily-Load-process.

Appendix H

Engineering Calculations

WWHM2012
PROJECT REPORT

Project Name: 2018-07-24-cm removal
Site Name: KMBY-0010
Site Address:
City :
Report Date: 7/24/2018
Gage : Everett
Data Start : 1948/10/01
Data End : 2009/09/30
Precip Scale: 1.00
Version Date: 2017/04/14
Version : 4.2.13

Low Flow Threshold for POC 1 : 50 Percent of the 2 Year

High Flow Threshold for POC 1: 50 year

PREDEVELOPED LAND USE

Name : Basin 1
Bypass: No

GroundWater: No

Pervious Land Use	acre
C, Lawn, Flat	32
Pervious Total	32

Impervious Land Use	acre
Impervious Total	0
Basin Total	32

Element Flows To:

Surface	Interflow	Groundwater

MITIGATED LAND USE

Name : Basin 1
Bypass: No

GroundWater: No

Pervious Land Use	acre
C, Lawn, Flat	32
Pervious Total	32

Impervious Land Use	acre
Impervious Total	0
Basin Total	32

Element Flows To:

Surface	Interflow	Groundwater

ANALYSIS RESULTS

Stream Protection Duration

Predeveloped Landuse Totals for POC #1
Total Pervious Area:32
Total Impervious Area:0

Mitigated Landuse Totals for POC #1
Total Pervious Area:32
Total Impervious Area:0

Flow Frequency Return Periods for Predeveloped. POC #1

Return Period	Flow(cfs)
2 year	2.659061
5 year	5.012479
10 year	7.080633
25 year	10.344832
50 year	13.294688
100 year	16.727327

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	Flow(cfs)
2 year	2.659061
5 year	5.012479
10 year	7.080633
25 year	10.344832
50 year	13.294688
100 year	16.727327

Perlnd and Implnd Changes

No changes have been made.