Joint Base Lewis-McChord
Municipal Separate Storm Sewer System (MS4)
Stormwater Management Plan
Construction Site Stormwater Runoff Control Program

Prepared for:
Environmental Division
Directorate of Public Works
Joint Base Lewis-McChord, WA

Public Works, Joint Base Lewis-McChord Environmental Division		
Procedure: Construction Site Stormwater Runoff Control Program **Document ID: PWE-633**		
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Construction Site Stormwater Runoff Control Program

Joint Base Lewis-McChord, Washington

Prepared by

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30 June 2017

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Construction Site Stormwater Runoff Control Program
Joint Base Lewis-McChord, Washington

1. INTRODUCTION

a. **General**. This Construction Site Stormwater Runoff Control Program (CSSRCP) is intended to reduce pollutant discharges to the Army's storm drain system and to mitigate water quality impacts to receiving waters associated with construction activities to the maximum extent practicable (MEP). The CSSRCP requirements apply to all construction sites that have the potential to discharge pollutants in stormwater to areas outside the construction limits. The program requires construction site operators to control waste and apply erosion and sediment control Best Management Practices (BMPs) in compliance with this program and with Joint Base Lewis McChord's (JBLM) Municipal Separate Storm Sewer System (MS4) Permit Number WAS-026638 (EPA, 2014).

b. **CSSRCP Components**.

(1) Direction and oversight to ensure entities responsible for construction follow JBLM construction requirements.

(2) Legal authority for implementing the program.

(3) Policies/procedures used to enforce construction compliance.

(4) BMPs to be utilized for construction projects.

(5) Contract language to be used in in requests for proposals, and contracts to ensure compliance with the program.

(6) Procedure for review and approval of Storm Water Pollution Prevention Plans (SWPPPs).

(7) A Construction Site Inspection Plan including a process for tracking construction sites compliance for water quality impacts, and erosion/sediment control.

(8) Training requirements for design reviews and inspections and where records are maintained.

2. OVERSIGHT

a. The CSSRCP is administered and overseen by the JBLM Directorate of Public Works (DPW). Day to day management is administered by the Stormwater Program in the Environmental Division of DPW. The Stormwater Program coordinates with staff in the Engineering Services Division (ESD) and the Business, Operations and Integration Division (BOID).

b. The Stormwater Program's responsibility is to track construction stormwater implementation at construction sites, coordinate with ESD construction managers and inspectors, and notify senior staff if violations are identified. The stormwater program will also:

(1) Maintain a list of construction BMPs to be used on JBLM;
(2) Conduct quarterly inspections of stormwater controls at priority construction sites; and
(3) Train responsible staff.

c. ESD staff will primarily provide day to day inspection at construction sites including stormwater control measures. The JBLM Stormwater Program will provide periodic stormwater inspections of construction sites as well as stormwater site visits as requested by construction site managers to ensure compliance with construction EPPs, SWPPPs, and CGPs.

d. The Water Systems Manager in BOID is the "owner" of the JBLM stormwater system. The stormwater program and ESD coordinate with the BOID to update and receive approvals for stormwater actions.

3. REGULATORY AUTHORITY

JBLM Regulation 200-3 establishes the federally mandated stormwater management program for JBLM. The regulation requires all JBLM personnel and organizations to comply with the stormwater and construction permits issued to JBLM. In the case of the CSSRCP, this includes Permit No. WAR10F000, Nationwide Construction General Permit (CGP) and Permit No. WAS-026638, JBLM MS4 Permit. All personnel will properly manage stormwater on JBLM and eliminate and/or reduce unpermitted discharge of pollutants to the storm sewer system to the Maximum Extent Practicable (MEP). The regulation ensures that JBLM eliminates the discharge of pollutants in stormwater to waters (ground water, lakes, wetlands, creeks and streams) of Washington State and the Puget Sound in accordance with the NPDES permits.

4. ENFORCEMENT

a. Site inspections will be periodically conducted for construction sites which may result in findings. Findings will be reported to the construction site operator for resolution. Repeated or unresolved findings may result in a violation. Violations will be determined by the Site Inspector in consultation with the Stormwater Program Manager or other senior environmental staff.

b. Violations by contractors will be processed through contract management personnel. Other violators (e.g. troop construction projects) will be notified through the work-area supervisor, and/or directly to unit commanders. See Section 8 for site inspection procedures.

c. Significant violations of stormwater permits are punishable under various Federal, State, or Local law; refer to 40 CFR 403.8(f)(1)(vi). Military personnel may be subjected to punitive

action under the Uniform Code of Military Justice, and civilian personnel may be subjected to disciplinary action under civilian personnel rules. Contractors violating stormwater requirements are subject to contract penalties or termination. The penalty (fines and/or imprisonment) provisions are identified in JBLM Regulation 200-3, the JBLM MS4 Permit (WAS-026638) Section V.B.1. and Appendix I of the 2017 CGP.

d. Non-compliance issues not resolved in a timely manner through the supervisor and/or unit commander and repeat offenders may be reported to the Joint Base Commander for resolution of the issues and determination of applicable penalties.

e. Penalty assessments against JBLM or JBLM personnel resulting from inspections by regulatory agencies (normally EPA Region 10 or Washington Department of Ecology) must be immediately reported in accordance with Army Regulation 200-1, Environmental Protection and Enhancement, Section 16-4.

5. CONSTRUCTION SITE BMPS

Over 40 approved construction site BMPs to be used at JBLM are listed in Chapter 4, Volume II of the Stormwater Management Manual for Western Washington (Ecology, 2014). Typical Construction BMPs include Silt Fencing (BMP C233), Sediment Trap (BMP C240), Buffer Zones (BMP C102), etc. All BMPs used in the project shall be listed in the SWPPP and shown on site maps.

6. CONTRACT LANGUAGE

All contracts issued at JBLM are required to meet the requirements of most current edition of the JBLM Public Works Design Standards. The Design Standards, in-turn, incorporate the provisions of JBLM's MS4 permit and the CGP that apply to all stormwater projects including construction. A portion of a contract is shown in Appendix A.

7. CONSTRUCTION SITE PLAN REVIEW

a. **General.** A construction site plan (i.e. EPP or SWPPP) shall be prepared and submitted to the JBLM Stormwater Program using criteria identified below. Figure 1 shows the decision process for determining the appropriate construction stormwater measures and submittals that are required.

b. **Sites Less Than 5,000 Square Feet**. Construction stormwater pollution prevention practices shall be implemented for sites smaller than 5,000 square feet; however, a SWPPP document is not required. For sites smaller than 5,000 square feet, documentation of applicable pollution prevention measures shall be included in the site's Environmental Protection Plan (EPP). A site layout map showing drainage paths, and a list of BMPs shall be submitted to the Water Systems Manager.

c. **Sites Larger Than 5,000 Square Feet But Less Than 1 Acre**. For site disturbing more than 5,000 square feet but less than one acre, a JBLM Construction SWPPP shall be prepared and submitted to the Stormwater Program for review and approval. A checklist to assist in JBLM SWPPP preparation is provided in Appendix B.

d. **Sites Larger Than 1 Acre.** For sites disturbing one acre or greater, a construction SWPPP shall be prepared that complies with EPA's Construction General Permit (CGP, EPA, 2017) requirements. An EPA SWPPP template in Word® is available from EPA's website page at https://www.epa.gov/sites/production/files/2017-04/sw_cgp2017_swppptemplate-4-5-17.docx**.** Contractors shall electronically submit a Notice of Intent (NOI) via EPA's NPDES eReporting Tool (NeT) to obtain coverage under EPA's CGP prior to any earth disturbing activities at the site. Following completion of the NOI, the system will generate an acknowledgement letter with a site specific permit number and start the 14-day waiting period for permit coverage. The NOI, acknowledgement letter, and site specific permit number must be included in the official jobsite SWPPP and submitted to the Stormwater Program prior to breaking ground. Access to NeT may be found at: https://www.epa.gov/npdes/stormwater-discharges-construction-activities#ereporting**.**

e. **Sites disturbing between 1 and 5 acres.** Sites disturbing 1-5 acres that are short duration (i.e. one to two months) may be eligible for a CGP waiver. Waiver information may be obtained from Appendix C of the 2017 CGP or online at: https://www.epa.gov/npdes/rainfall-erosivity-factor-calculator-small-construction-sites

d. **Notice of Termination**. At the conclusion of the construction project, the contractor shall electronically terminate coverage under the CGP using the NeT system and provide a copy of the Notice of Termination (NOT) to the Stormwater Program.

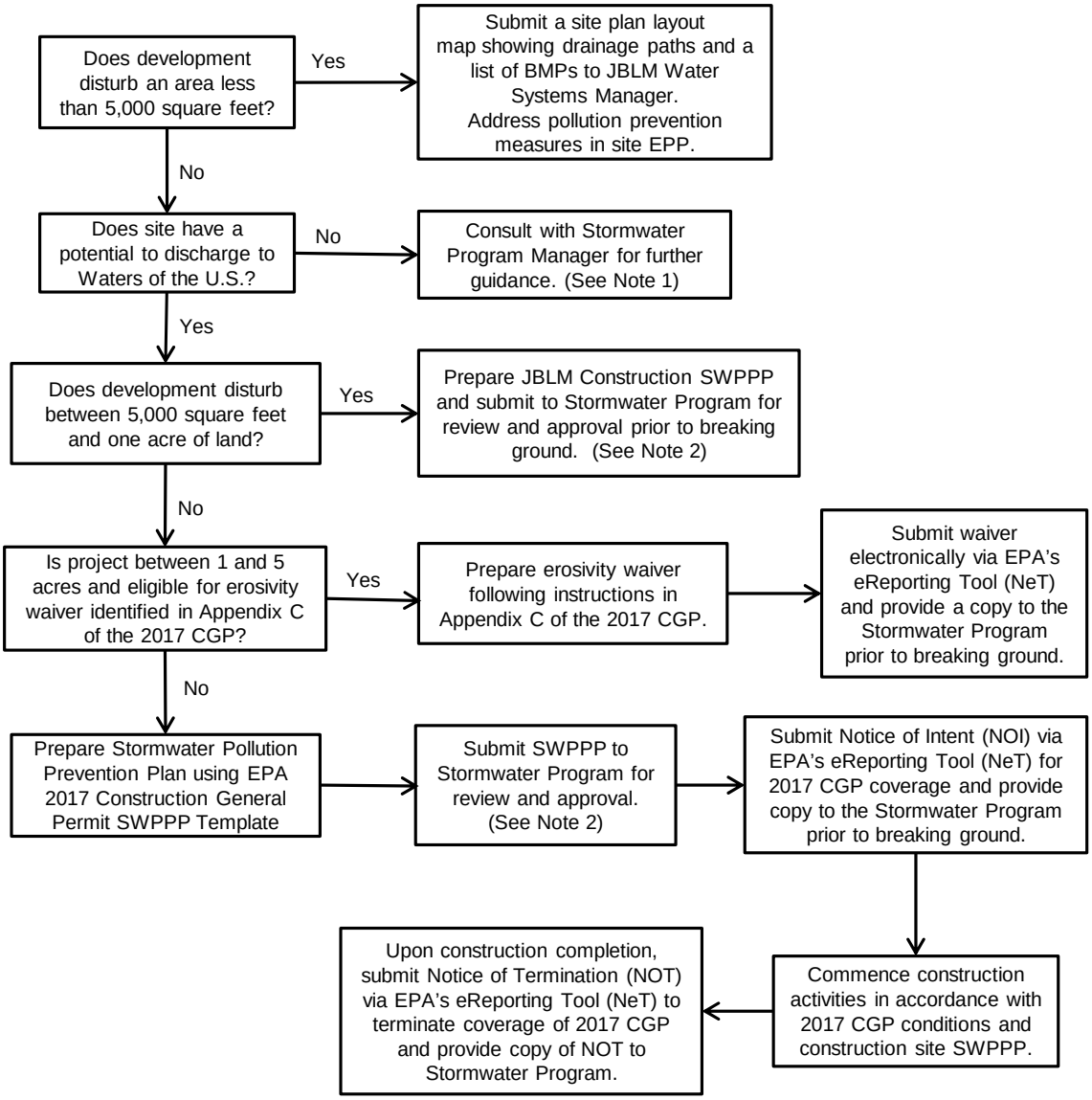
8. CONSTRUCTION SITE INSPECTION PLAN

a. **General**. The purpose of the Construction Site Inspection Plan is to meet requirements of Section II.B.4 (g) of JBLM's MS4 permit. The Plan provides direction to personnel implementing the conditions of the permit to ensure compliance to the MEP.

b. **Criteria which trigger a Site Inspection.** The following criteria will be applied to initiate a site inspection by the Stormwater Program:

(1) All sites one acre or larger will be inspected quarterly.
(2) All sites 5,000 square feet or greater that have land disturbing activities within 50 meters of a receiving water will be inspected monthly.
(3) All sites, regardless of size or location that have a known or suspected violation, or receive a complaint will be inspected within 72 hours of the Stormwater Program receiving knowledge of a possible or known violation.
(4) Any site may be put on a more frequent inspection schedule based on past inspection findings or potential violations.

Figure 1 - Construction Stormwater Pollution Prevention Plan (SWPPP)



NOTE 1 Most locations on JBLM have the potential to discharge to Waters of the U.S. Contact the Stormwater Manager for any sites seeking exemption from permit coverage based on no potential to discharge.
NOTE 2 Allow 2 weeks for review of each submittal or re-submittal.

c. **Site Visits.** Site visits are informal site inspections that are used to educate construction site personnel on proper construction site stormwater controls and other site specific applicable compliance regulations. Findings or potential violations will not be issued at a site visit. Visits most effectively are conducted at the beginning of construction but can be conducted at any time. Stormwater Program staff may initiate a site visit or managers can request a site visit from the Stormwater Program. Visits generally follow the same procedure as inspections but may include only specific topics. Visits will be tracked in the same manner as inspections.

d. **Site Inspection Process:**

(1) Notify and schedule an inspection with the site operator;
(2) Arrive onsite with the appropriate personal protective equipment;
(3) Sign site entry form;
(4) Review SWPPP documentation;
(5) Conduct an on the ground visual inspection. Complete inspection form during walk through. If using computer tablet, input data into APIMS stormwater inspection module;
(6) At conclusion of inspection, review findings with the site point of contact (POC);
(7) Inform POC of any additional actions that must be completed;
(8) If electronic, upload APIMS inspection for approval. Otherwise complete paper form and submit to Stormwater Program Manager for approval/action.
(9) Follow up on action findings.
(10) Initiate administrative action for unresolved findings that have developed into violations (see stop work procedures below).

e. **Stop Work Procedures**. Repeated unresolved findings may result in a violations. Flagrant violations may require the inspector to issue a stop work order. The following conditions will likely trigger a stop work order:

(1) An unauthorized release to waters of the U.S;
(2) Activities which, if continued, are likely to result in an unauthorized release to waters of the U.S;
(3) Activities which endanger personnel; and
(4) Re-occurring inspection findings.

f. **Contract Representative Authority.** All construction projects have a Department of Defense contract representative who has the authority to stop work. Upon receiving notification from the site inspector, the Stormwater Program Manager will notify the contract representative who will in-turn stop the work.

g. **Joint Base Commander Authority**. The Joint Base Commander is responsible for all activities on JBLM and has the authority to stop work if other means are not successful. If the contract representative is unavailable or if the violation may endanger human health or the environment, the site inspector will notify the Stormwater Program Manager, who will in turn notify the Branch Chief, the Division Chief, and the Director of Public Works. The Director of

Public Works will determine if the activity requires intervention and notify the Joint Base Commander. Additionally, EPA Region 10 may be notified for assistance with a "Stop Work Order".

h. **Reporting**. Reporting will consist of a task list that records SWPPPs, submittal date, approval date, resubmittal date (if required). Site inspections, site visits, reinspections will be recorded electronically in the APIMS database. Inspections may also be printed for review by EPA, if requested. A tabular summary of all inspections will be maintained for inclusion in the JBLM MS4 Annual Report. .Site inspection forms to be used include

(1) Sites working under the CGP (Attachment 1, Appendix C).
(2) Sites disturbing 5,000 square feet or greater which are not permitted by the CGP (Attachment 2, Appendix C).
(3) Site visits (Attachment 3, Appendix C).

9. TRAINING

All staff responsible for construction stormwater management will be trained to conduct those activities for which they are responsible. Orientation and training will be completed within the first six months of employment for new staff who work directly on construction stormwater management matters. Staff performing Site Visits or Site Inspections at construction sites will receive Department of Ecology Certified Erosion and Sedimentation Control Lead (CESCL) training and maintain certification. Follow-up training will be provided as necessary to address changes in procedures, techniques or requirements. Records of relevant training provided or obtained, will be maintained. A summary of each year's training will tracked and included in the corresponding Annual Report to the EPA.

10. REFERENCES

a. Environmental Protection Agency, 2014. Permit No. WAS-026638. Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4). Authorization to Discharge Under the Nation Pollutant Discharge Elimination System - Issued to Joint Base Lewis-McChord by United States Environmental Protection Agency, Region 10, 1200 Sixth Ave, Suite 900, Seattle, Washington 98101. December 4.

b. Environmental Protection Agency, 2017. Permit No. WAR10F000. National Pollutant Discharge Elimination System General Permit for Discharges from Construction Activities. Issued by EPA Headquarters, Washington D.C. February 16.

c. Washington Department of Ecology, 2014. Stormwater Management Manual for Western Washington. Prepared by Washington Department of Ecology Water Quality Program. Publication No. 14-10-055.

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APPENDIX A. Sample JBLM Contract Language

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SECTION 01 11 00

STATEMENT OF WORK

Version 1.28
Issued February 23, 2015

CONSTRUCTION

Pre-RFP Draft
Date: February 26, 2016

1. GENERAL DISCUSSION

1.1. Project Identification

1.1.1. Project Title: Construct Replacement Well #31 Water Well Drilling and Pumping Tests

1.1.2. IJO Number(s): MDH001044J

1.1.3. Project Package Number(s): PB1613

1.2. Description of Work

1.2.1. The Contractor shall supply all supervision, labor, equipment, and materials to perform all work in strict accordance with the umbrella contract specifications, this statement of work, and identified drawings to provide water well drilling and pumping tests. Well construction shall meet the Minimum Standards for Construction and Maintenance of Wells. (Chapter 173-160 Washington Administrative Code [WAC]).

1.2.2. The total depth for the well is dependent upon the depths and characteristics of the water-bearing zones. The goal is to drill, sample, case, screen and test a 24-inch-diameter well to a depth of 600 feet. The aquifer characteristics will be evaluated for the capability of producing high quality water at a production rate of approximately 1,000 gpm. If the desired capacity and water quality is not encountered, the test well will be advanced as a 16-inch-diameter well to a total depth of up to 1,000 feet and an additional aquifer test could be conducted on a deeper aquifer, if encountered.

The drilling method to be used is cable-tool techniques. Reverse-circulation flood-rotary and mud-rotary methods will not be allowed.

For bidding purposes, assume a 24-inch-diameter temporary casing and surface seal (Chapter 173-160-231 WAC) placed to a depth of 150 feet, 20-inch-diameter casing placed to approximately 600 feet, and 16-inch-diameter casing placed to 1,000 feet. The desired pump chamber diameter is either 20-inch or 16-inch, depending on the total depth drilled and casing advancement. The preferred well completion is to install a well screen inside the 20-inch casing installed from ground surface to 600 feet or within the 16-inch diameter casing installed from ground surface to up to 1,000 feet.

3.1.2. Dimensions and utility locations are approximate and must be verified in the field.

4. SPECIFICATIONS AND CODES

4.1. Codes

4.1.1. The Contractor shall comply with the most recent edition, at time of solicitation, of all pertinent Local, State, and Federal building and life/health/safety codes, to include the following:

a. Applicable Unified Facilities Criteria (UFC)
b. UFC 1-200-01: General Building Requirements
c. ASA IE&E SDD policy http://www.asaie.army.mil/Public/IE/doc/ASA(IEE)-SDD-policy-update-(16-Dec-2013).pdf.
d. EM 385-1-1 (http://www.publications.usace.army.mil/USACEPublications/EngineerManuals.aspx)
e. National Electric Code
f. National Fire Protection Association (NFPA) Codes
g. Army Installation Information Infrastructure Architecture Policy (I3A)
h. USACE Energy and Water Conservation Design Guide (http://www.wbdg.org/references/pa_dod_energy.php)
i. JBLM Design Standard specifications (http://www.lewis-mcchord.army.mil/designstandards/)
j. PWE-707, Standard Operating Procedure for Construction and Demolition (C&D) Waste Planning and Reporting (Available through government Project Manager)

k. Washington Administrative Code (WAC)

4.2. Specifications

4.2.1. The Contractor shall comply with all relevant specification sections as set forth in the base contract.

5. SUBMITTALS

5.1. Project Submittal Requirements

5.1.1. All submittals shall be submitted in accordance with the specification section titled SUBMITTAL PROCEDURES. Required submittals are identified in their applicable specification sections.

5.1.2. In addition to the requirements as outlined in the specification section titled SUBMITTAL PROCEDURES, an electronic copy of each submittal shall be provided to the Government. Delivery method shall be decided during the CQC coordination meeting.

5.1.3. See attached form 4288 (Submittal register).

5.2. Close-out Submittal Requirements

5.2.1. The Contractor shall provide close-out submittals as required by the contract specifications.

5.2.2. The Contractor shall provide a Letter of non retention for all contract documents, plans, drawings, and specifications after the destruction of all copies that are not required by the Contractor to meet legal requirements.

SECTION: 33 40 00 STORM DRAINAGE UTILITIES

Criteria

a. UFGS SECTION 33 40 00 STORM DRAINAGE UTILITIES
b. Underground Injection Control Program WAC 173-218
c. WA State Department of Ecology Guidance for UIC Wells that Manage Stormwater Publication 05-10-067
d. WA State Department of Ecology Stormwater Management Manual for Western Washington Publication 12-10-030
e. Permit No. WAS-026638, Stormwater Discharges from Small Municipal Separate Storm Sewer System (MS4), individual permit to JBLM
f. Permit No. WAR05000F, Nationwide Multi-Sector General Permit (MSGP), Discharges from Industrial Facilities.
g. Permit No. WAR12000F, Nationwide Construction General Permit (CGP), Discharges from Construction Activities

Changes or Criteria Notes to Unified Facilities Guide Specifications (UFGS)

Paragraph # and Title (if any)	Note to Designer	Change Text
1.3 SUBMITTALS SD-01 Preconstruction Submittals	Add this paragraph:	Pre-construction Registration Form for Underground Injection Control Well
1.5 Underground Injection Control Wells	Add this paragraph:	**Underground Injection Control Wells** Most Class V Underground Injection Control (UIC) wells must be registered with the Washington State Department of Ecology. UIC wells that do not require registration are wells that are exempt from the UIC well status as stated in WAC 173-218-050. UIC wells at single-family homes that only receive residential roof runoff or are used to control basement flooding are exempt from registration. Registration information required by the Department of Ecology must be provided to Public Works Water Program, BLDG 2012 Room 323 for registration with Ecology. Registration forms are available for single and multiple sites and can be obtained from Public Works Water Program or the Department of Ecology UIC program website. Wells must be registered prior to construction. Once registration forms are submitted a 60-day wait period starts. After the 60-day wait period the well is considered registered and authorized for installation.

Design Requirements

1. Registration forms can be obtained at UIC Registration Forms . The WA Department of Ecology has 60 days to determine if the UIC well is rule authorized and to approve the registration of the UIC well.

2. Stormwater Management (SWM) Systems.
    a. The Government's Consultant or Contractor designers are responsible for design, development, and installation of all stormwater facilities at their respective sites.
    b. Joint Base Lewis-McChord (JBLM) has been issued a Small Municipal Separate Storm Sewer System (MS4) permit (WAS-026638) for stormwater discharges. The permit requires any new development or redevelopment disturbing more than 5,000 square feet to develop a Stormwater Site Plan consistent with the requirements of the Washington Department of Ecology Stormwater Management for Western Washington (Stormwater Manual). The Site Plan shall be submitted to the JBLM Systems Manager for review. A checklist is available from the PW Environmental Division Stormwater Program that assists the designer in meeting the permit requirements.
    c. Management of stormwater must be integrated into other project aspects to meet the sustainability goals of the installation as a whole. Design stormwater systems to maintain the hydrologic functions of the site. Consider reusing stormwater on site for irrigation and landscaping. This contributes to the installation's water savings and reuse goals.
    d. Design and size stormwater facilities to accommodate stormwater runoff from all site development surfaces and all runoff from buildings in conformance with the latest adopted edition of the Ecology stormwater manual. Design goals should be to reduce or eliminate offsite stormwater flows and restore the pre-development hydrology of the project area. Designs must meet all of the requirements below.
        - The designs must comply with Section 438 of the Energy Independence and Security Act (EISA) and NPDES MS4 Permit No. WAS-026638.
        - Fence all standing water facilities with side slopes exceeding 3h:1v for safety. Complete all standing water facilities with a minimum of 6 inches of topsoil and plantings appropriate for the pond function.
        - Within housing, commercial, and organizational areas, ponds cannot be constructed with side slope exceeding 3h:1v or deeper than 2.5 feet.
        - All ponds, swales, or other like stormwater features must be vegetated and/or have amended soils added to provide appropriate function.
        - All ponds, swales, or other like stormwater features shall blend with project landscaping to the maximum extent practicable.
        - Storm drain lines and branches within the site shall be polyvinyl chloride (PVC) plastic, ductile-iron, CPEP, or HDPE pipe.
        - Infiltration rates (including topsoil and vegetation), amended or on-site soils mixes, and seed mixtures should all be addressed in the design.
        - Whenever possible, shrub beds, street plants, and similar features shall be used through rain garden type features for stormwater runoff management.
    e. Onsite treatment and infiltration: Use the Stormwater Manual and the Low-Impact Development Technical Manual for Puget Sound. Request any exceptions for approval by JBLM PW. However, consider the portions of Section 3.3 of Volume III of the Stormwater Manual pertaining to the methods for determining infiltration rates as a recommended guideline. Conduct on-site soil tests in conformance with standard engineering practices and to the satisfaction of JBLM PW. Use the soil tests to determine a short-term infiltration rate. Once determined, apply appropriate factors of safety in conformance with standard engineering practices to the short-term infiltration rate to arrive at a long-term design infiltration rate based on site conditions, in conformance with the designer's professional opinion and discretion, and the approval of JBLM PW, prior to full design. Include detailed information in the design regarding amended soil mixtures, soil depths, vegetation requirements and seed mixtures for all stormwater management features.

- JBLM prefers stormwater infiltration methods that are small, distributed throughout the project site, and as visually unobtrusive as possible. Preferred methods include elements such as car parks, rain gardens, porous pavement, cisterns, or other low-impact development elements.
- Use pervious pavements to infiltrate stormwater for parking areas in housing, commercial, and organizational areas that are not subject to industrial activities or high traffic. If there is runoff that the pervious pavement cannot infiltrate, use car parks or rain gardens to infiltrate this runoff. Car parks shall meet the car park standard for landscape and shading.
- Use sheet flow runoff to infiltration features to the maximum extent practicable. Consider safety when sheet flowing large amounts of runoff.

f. The use of underground injection control for stormwater management must meet the requirements of Chapter 173-218 of the Washington Administrative Code (WAC) Underground Injection Control (UIC) Program. Submit completed registration forms to the JBLM Stormwater Office for registration with Ecology 65 days prior to any construction of UIC facilities. Obtain registration forms and any further information from the JBLM Environmental Division.

g. Low-impact development techniques shall comply with the Low Impact Development Technical Guidance Manual for Puget SoundErosion and Sediment Control. Provide appropriate erosion and sediment controls on all construction sites that will have ground disturbance. Proper implementation and maintenance of appropriate best management practices (BMPs) is critical to control any adverse water quality impacts from construction activities adequately. Discharges must not violate the state's surface water quality standards (WAC Chapter 173-201A) and groundwater quality standards (WAC Chapter 173-200).

a. Volume II, Chapter 4 of the Stormwater Manual provides standards and specifications for BMPs during construction that are approved for use on JBLM. Consider other BMPs with proper review and approval by JBLM PW.

b. Erosion and sediment control measures at construction sites less than 7,000 square feet may be documented in the Environmental Protection Plan.

c. Submittal of a site-specific Storm Water Pollution Prevention Plan (SWPPP) is required for construction activities that will have a land disturbance of 5,000 square feet or more. For sites that disturb between 5,000 square feet and one acre, the Construction SWPPP shall to be submitted to the JBLM PW Stormwater Program for approval.

d. Construction sites that will have a land disturbance of one or more acres (or are part of a common plan of development that will disturb an acre or greater) or projects that have multiple construction sites under one contract if the total land disturbance for all sites is greater than one acre, must be covered under the EPA's NPDES Construction General Permit (CGP). A Notice of Intent must be submitted to EPA a minimum of 14 days before starting work. A completed Permit Application shall be submitted to the Stormwater Program Manager prior to submittal to EPA. Anticipate up to 2 weeks for review for each submittal or re-submittal.

Notes to Designers on Drawing Content

Standard Details

Applicable Points of Contact
Design Standards

APPENDIX B. JBLM SWPPP Checklist

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JBLM Construction Stormwater Pollution Prevention Plan Checklist

(for sites >5,000 sq ft and NOT subject to the CGP)

Project Name: _____
JBLM IJO No. _____
Contract No. _____
Review Date: _____

Section I – Construction SWPPP Narrative

Construction Stormwater Pollution Prevention Elements

Thirteen Required Elements - Construction Stormwater Pollution Prevention Plan

1. ___ Show clearing limits. See Site Plan
2. ___ Show construction access. See Site Plan
3. ___ List methods to control flow rates
4. ___ List sediment controls
5. ___ Describe methods to stabilize soils, if required
6. ___ List methods to protect slopes, if required
7. ___ Show and describe drain inlet protection
8. ___ Describe channels and outlet stabilization
9. ___ Describe measures to control pollutants
10. ___ Describe methods to de-water, if required.
11. ___ Show measures to control de-watering, if required
12. ___ Describe O & M for BMPs
13. ___ Show project management lines of authority
14. ___ Describe measures to protect low impact development BMPs

Project Description

1. Total project area _____ sq ft.
2. Total proposed impervious area _____ sq ft
3. Total proposed area to be disturbed, including off-site borrow and fill areas _____ sq ft
4. Total volumes of proposed cut and fill _____ cu yds fill, _____ cu yds cut

JBLM Construction Stormwater Pollution Prevention Plan Checklist

(for sites >5,000 sq ft and NOT subject to the CGP)

Project Name: _____
IJO Number _____
Contract No. _____

Existing Site Conditions

1. Describe existing topography Flat Rolling Steep (>10%)
2. Identify and show existing vegetation on Site Plan
3. Show existing drainage on Site Plan

Adjacent Areas

1. Show adjacent areas on Site Plan which may be affected by site disturbance or drain to project site.

___ a. Streams
___ b. Lakes
___ c. Wetlands
___ d. Residential Areas
___ e. Roads
___ f. Other

2. ___ Describe the downstream drainage path leading from the site to the receiving body of water. (Minimum distance of 400 yards.)

Critical Areas

1. ___ If present, show and describe critical areas that are on or adjacent to the site.
2. ___ Describe special requirements for working in or near critical areas.

Soils

1. Description of on-site soils.

___ a. Soil name(s)
___ b. Soil mapping unit
___ e. Permeability
___ f. Depth
___ g. Texture

JBLM Construction Stormwater Pollution Prevention Plan Checklist

(for sites >5,000 sq ft and NOT subject to the CGP)

Project Name: _____
IJO Number _____
Contract No. _____

Erosion Problem Areas

1. ___ Describe and show potential erosion problems on Site Plan.

Construction Schedule

1. ___ Provide a proposed construction schedule.
2. Wet Season Construction Activities
   ___ a. Proposed wet season construction activities.
   ___ b. Proposed wet season construction restraints for environmentally sensitive/critical areas.

Engineering Calculations

1. ___Provide Design Calculations.
   ___ a. Sediment Ponds/Traps
   ___ b. Diversions
   ___ c. Waterways
   ___ d. Runoff/Stormwater Detention Calculations

Section II - Erosion and Sediment Control Plans

General

Site Plan

1. ___ Vicinity Map
2. ___ Identfy Facility Number and street location of subject property.
3. ___ Show North Arrow.
4. ___ Indicate boundaries of existing vegetation, e.g. tree lines, other areas, etc.

JBLM Construction Stormwater Pollution Prevention Plan Checklist

(for sites >5,000 sq ft and NOT subject to the CGP)

Project Name: _____
IJO Number _____
Contract No. _____

5. ___ Identify and label areas of potential erosion problems.
6. ___ Identify on-site or adjacent surface waters, critical areas and associated buffers.
7. ___ Show existing and proposed contours – 2 ft contours.
8. ___ Indicate drainage basins and direction of flow for individual drainage areas.
9. ___ Label final grade contours and identify developed condition drainage basins.
10. ___ Delineate areas that are to be cleared and graded.
11. ___ Show all cut and fill slopes indicating top and bottom of slope catch lines.

Conveyance Systems

1. ___ Show locations for swales, interceptor trenches, or ditches.
2. ___ Show all temporary and permanent drainage pipes, ditches, or cut-off trenches required for erosion and sediment control.
3. ___ Provide minimum slope and cover for all temporary pipes or call out pipe inverts.
4. ___ Show grades, dimensions, and direction of flow in all ditches, swales, culverts and pipes.
5. ___ Describe details for bypassing off-site runoff around disturbed areas.
6. ___ Indicate locations and outlets of any dewatering systems.

Erosion and Sediment Control Facilities

1. ___ Show the locations of sediment trap(s), pond(s), pipes and structures.
2. ___ Show dimension of pond berm widths and inside and outside pond slopes.
3. ___ Indicate the trap/pond storage required and the depth, length, and width dimensions.
4. ___ Provide typical section views through pond and outlet structure.
5. ___ Provide typical details of gravel cone and standpipe, and/or other filtering devices.
6. ___ Detail stabilization techniques for outlet/inlet.
7. ___ Detail control/restrictor device location and details.
8. ___ Specify mulch and/or recommended cover of berms and slopes.
9. ___ Provide rock specifications and detail for rock check dam(s), if applicable.

Project Name: _____
IJO Number _____
Contract No. _____

10. ___ Specify spacing for rock check dams as required.
11. ___Provide front and side sections of typical rock check dams.
12. ___Indicate the locations and provide details and specifications for silt fabric.
13. _____ Show the construction entrance and provide a detail.

Detailed Drawings

1. ___ Any structural practices used that are not referenced in the Ecology Manual should be explained and illustrated with detailed drawings.

Other Pollutant BMPs

1. ___ Indicate on the site plan the location of BMPs to be used for the control of pollutants other than sediment, e.g., concrete wash water.

Monitoring Locations

1. ___ Indicate on the site plan the water quality sampling locations to be used for monitoring water quality on the construction site, if applicable.

Submit to JBLM Stormwater Program at: usarmy.jblm.imcom.list.dpw-stormwater@mail.mil

APPENDIX C. Site Inspection/Site Visit Forms

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Assessment Date:_____
Assessment Id#_____

CONSTRUCTION GENERAL PERMIT QUALITY ASSURANCE ASSESSMENT CHECKLIST
2017 Permit

General Information			
Project Name			
Project No.			
Permittee/Operator			
Operator POC–Name/Phone/E-mail			
Gov't POC – Name/Phone/E-mail			
Assessor's Name / Contact Info.			
NOI # tracking number		**Receiving water and outfall #**	
Start / End Time		**Discharge from site**	☐Yes ☐No
Project Size (acres)		**Weather**	
Describe present phase of construction			
Type of Inspection ☐ Routine ☐ Follow-Up ☐ Spot Check ☐ Possible Violation (Describe in Other)			
Other			

A. Records and Procedures

	Subject with notes	Status
1	Is the SWPPP Team identified and current? (Part 7.2.1)	☐ Pass ☐ Fail
2	Is a site map(s) available showing all required features, BMPS and points of compliance? (Part 7.2.6)	☐ Pass ☐ Fail
3	Are there underground injection control wells on the site? (Part 7.2.14.3) If yes, list the WDOE registration number:_____	☐ Pass ☐ Fail
4	Did properly appointed personnel conduct inspections; to include indicated schedule? (Parts 4.1.1 & 4.1.2)	☐ Pass ☐ Fail
5	Are inspection reports and corrective actions on file? (Parts 4.1.7.3 & 5.4.4)	☐ Pass ☐ Fail
6	Is training performed and documented? (Part 6)	☐ Pass ☐ Fail
7	Is the SWPPP Certified? (Part App. I, Part I.11.b)	☐ Pass ☐ Fail
8	Are the NOI, acknowledgement letter, CGP maintained at the site and readily accessible? (Parts 7.3 & 7.2.16)	☐ Pass ☐ Fail
9	Are amendments to the SWPPP being recorded? (Part 7.4)	☐ Pass ☐ Fail

A. Records and Procedures **(continued)**

	Subject with notes	Status
10	Do Subcontractors have agreements, to include certification, in place to ensure they understand and comply with the SWPPP?	☐ Pass ☐ Fail
11	Is applicable staff delegated, with written authorization in the SWPPP?	☐ Pass ☐ Fail
12	Are Spill Reporting Procedures on file and are spills/leaks reported as required?	☐ Pass ☐ Fail
13	Notice posted (Part 1.5)	☐ Pass ☐ Fail
14	Other	☐ Pass ☐ Fail

B. Site Walk **(note what controls if any are being used)**

	EROSION AND SEDIMENT CONTROLS - Subject with notes	Status
1	Perimeter Controls (Part 2.1.2.2)	☐Pass ☐Fail ☐ NA
2	Track-out Controls (Part 2.1.2.3)	☐Pass ☐Fail ☐ NA
3	Stockpiled Sediments or Soils (Part 2.1.2.4)	☐Pass ☐Fail ☐ NA
4	Dust Controls (Part 2.1.2.5)	☐Pass ☐Fail ☐ NA
5	Steep Slope stabilization (Part 2.1.2.6)	☐Pass ☐Fail ☐ NA
6	Preserving Topsoil (Part 2.1.2.7)	☐Pass ☐Fail ☐ NA
7	Minimize Soil Compaction (Part 2.1.2.8)	☐Pass ☐Fail ☐ NA
8	Protect Storm Drain Inlets (Part 2.1.2.9)	☐Pass ☐Fail ☐ NA
9	Conveyance Channels (Part 2.1.3.1) & Sediment Basins (Part 2.1.3.2)	☐Pass ☐Fail ☐ NA
10	Use of Treatment Chemicals (Part 2.1.3.3)	☐Pass ☐Fail ☐ NA
11	Dewatering Practices (Part 2.1.3.4)	☐Pass ☐Fail ☐ NA
12	Other	☐Pass ☐Fail ☐ NA

B. Site Walk (continued)

	SITE STABILIZATION – Subject with notes	Status
13	Stabilization Practices (Part 2.2) and required criteria met (Part 2.2.2)	☐Pass ☐Fail ☐ NA
14	Other	☐Pass ☐Fail ☐ NA

	POLLUTION PREVENTION – Subject with notes	Status
15	Are only allowable discharges occurring? (Part 2.3.1 and 1.3)	☐Pass ☐Fail ☐ NA
16	Fueling and Maintenance of Equipment or Vehicles; includes spill supplies (Part 2.3.3.1)	☐Pass ☐Fail ☐ NA
17	Washing of Equipment and Vehicles (Part 2.3.3.2)	☐Pass ☐Fail ☐ NA
18	Storage, Handling, and Disposal of Construction Products, Materials, and Wastes (Part 2.3.3.3)	☐Pass ☐Fail ☐ NA
16	Washing of Applicators and Containers used for Paint, Concrete, or Other Materials (Part 2.3.3.4)	☐Pass ☐Fail ☐ NA
17	Fertilizer Discharge Restrictions (Part 2.3.5)	☐Pass ☐Fail ☐ NA
18	Other	☐Pass ☐Fail ☐ NA

General

Comments_____

_____

_____

_____

_____

Duty to Comply: You must comply with all conditions of the Construction General Permit (CGP). Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action by the Environmental Protection Agency. Per CGP Appendix Part Appendix I.1.

Follow-up Assessment? ☐ Yes ☐ No

_____
Assessor's Signature

Disclaimer: The regulatory obligations at construction sites covered by the Construction General Permit are the responsibility of the operator, not Joint Base Lewis-McChord. This inspection does not relieve the operator of the responsibility to comply with the Permit or other applicable regulations.

_____
Signature

Stormwater Program Manager
Title

Date of assessment:_____
Assessment ID# _____

CONSTRUCTION STORMWATER QUALITY ASSURANCE ASSESSMENT
Sites not covered by the Construction General Permit

General Information			
Project Name			
Project /Contract No.			
Operator			
Operator POC–Name/Phone/E-mail			
Gov't POC – Name/Phone/E-mail			
Assessor's Name / Contact Info.			
Receiving Water and Outfall Number			
Start Time		**End Time**	
Project Size		**Weather/ Stormwater flow**	
Describe present phase of construction			
Type of Inspection ☐ Routine ☐ Follow-Up ☐ Spot (Identify Items in Other) ☐ Possible Violation (Describe in Other)			
Other			

A. Records and Procedures

	Subject	Status
1	Is the SWPPP maintained at the site and readily accessible?	
2	Is the SWPPP signed by an appropriate individual?	
3	Are all areas included in SWPPP i.e. laydown areas, etc?	
4	Does the SWPPP reflect current site conditions?	
5	Is training/experience documented?	
6	Are inspections conducted per SWPPP?	
7	Did properly appointed personnel conduct inspections; to include indicated schedule?	
8	Other	
9	Other	
10	Other	

B. Best Management Practices (BMPs) List from SWPPP and whether it is being managed properly

	BMP	Comment	Status
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			

Comments/Notes_____

_____

_____

_____

_____

Follow-up Assessment? ☐ Yes ☐ No

_____
Assessor's Signature

Disclaimer: The regulatory obligations at construction sites covered by the MS4 Permit are the responsibility of the operator, not Joint Base Lewis-McChord. This assessment does not relieve the operator of the responsibility to comply with the Permit or other applicable regulations.

_____ _____
Signature Title

Date of visit:_____
Visit ID #_____

Construction Site Visit for Stormwater Compliance
Joint Base Lewis-McChord

General Information			
Project Name			
Project No.			
Operator			
Operator POC–Name/Phone/E-mail			
Gov't POC – Name/Phone/E-mail			
NOI # tracking number, note N/A if not a CGP site		**Receiving water and outfall #**	
Start / End Time		**Discharge from site**	Yes / No
Project Size (acres)		**Weather**	
Reason for Visit	☐ General Awareness ☐ Other, explain:		
Describe present phase of construction			
Other Site Notes:			

A. Records and Procedures

	Subject	Discussed
1	SWPPP Team identified and current (Part 7.2.1)	☐Yes ☐No
2	The site map(s) available showing all required features, BMPS and points of compliance. (Part 7.2.6)	☐Yes ☐No
3	If there are underground injection control wells on the site are they registered (Part 7.2.14.3)	☐Yes ☐No
4	Properly appointed personnel conducting inspections and following the SWPPP schedule (Parts 4.1.1 & 4.1.2)	☐Yes ☐No
5	Inspection reports and corrective actions on file (Parts 4.1.7.3 & 5.4.4)	☐Yes ☐No
6	Training performed and documented (Part 6)	☐Yes ☐No
7	The SWPPP is certified (Part App. I, Part I.11.b)	☐Yes ☐No
8	The NOI, acknowledgement letter, and CGP are maintained at the site and readily accessible (Parts 7.3 & 7.2.16)	☐Yes ☐No
9	Amendments to the SWPPP are recorded (Part 7.4)	☐Yes ☐No
10	Subcontractors have agreements, to include certification, in place to ensure they understand and comply with the SWPPP.	☐Yes ☐No
11	Other	

B. Management Practices and Sediment Controls Discussed

	Subject	Discussed
1	Perimeter Controls, i.e. silt fence, buffers, etc.	☐Yes ☐No
2	Sediment Track-out Controls.	☐Yes ☐No
3	Stockpiles of Sediment or Soils Control	☐Yes ☐No
4	Dust Controls	☐Yes ☐No
5	Soil Compaction and Top Soil Preservation	☐Yes ☐No
6	Storm Drain Inlets	☐Yes ☐No
7	Sediment Basins	☐Yes ☐No
8	Site Stabilization	☐Yes ☐No
9	Hazardous Material and Waste	☐Yes ☐No
10	Spill Prevention and Response	☐Yes ☐No
11	Washing (paints, concrete, equipment, etc.)	☐Yes ☐No
12	Posting Notice of Permit coverage	☐Yes ☐No
13	Other	
14	Other	

C. Comments/Notes

This Site Visit was provided by _____

Presented to (print name):

_____ _____

_____ _____

_____ _____