SECTION 015723 - TEMPORARY STORM WATER POLLUTION PREVENTION

PART 1 - GENERAL

1.1 SUMMARY

A. The work of this section consists of implementing measures to prevent Storm Water Pollution during construction activities, in accordance with the Clean Water Act, the National Pollution Discharge Elimination System (NPDES) permit program, and all Federal, State, and local regulations, and in accordance with the Storm Water Pollution Prevention Plan (SWPPP) to be prepared for this project.

1.2 DEFINITIONS

A. Definitions pertaining to sustainable development: As defined in ASTM E2114.

B. Environmental pollution and damage: The presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances; or degrade the utility of the environment for aesthetic, cultural, or historical purposes.

1.3 SUBMITTALS

A. Storm Water Pollution Prevention Plan: Submit Storm Water Pollution Prevention Plan after contract award and before the pre-construction conference.

1. Show that the Storm water Pollution Prevention Plan satisfies all Federal and State NPDES permit requirements.

B. Inspection Schedule: Submit schedule for inspection and monitoring of all storm water pollution prevention measures.

C. Erosion Control Products: Submit manufacturer’s product information and installation recommendations for silt fence, filter fabric, erosion control blanket, straw bales, and any other materials proposed for use on this project.

1.4 QUALITY ASSURANCE

A. Orientation Meeting: The Contractor shall be responsible for arranging and conducting an Erosion and Sediment Control meeting/briefing to inform all parties scheduled to be on-site during the project of the measures to be implemented for proper erosion and sediment control (may be included as part of the Pre-Construction Meeting).

1. Installation of silt fences, storm drain protection, and all other forms of erosion and sediment control shall not begin until after this meeting has occurred.

B. Erosion Control Supervisor: The Contractor shall designate the Erosion Control Supervisor who will be responsible for implementing the SWPPP.

1. The Erosion Control Supervisor shall be familiar with the SWPPP procedures and practices and shall ensure that emergency procedures and the SWPPP are updated as needed and available for inspection.

PART 2 - PRODUCTS

2.1 STORM WATER POLLUTION PREVENTION PLAN

A. Provide a Draft SWPPP which includes the following information and forms:

1. Site description.
2. Identification and contract information for Erosion Control Supervisor.
3. Expected sequencing of operations and construction schedule.
4. Weather monitoring procedure.
5. Descriptions and details of erosion controls, including dust control.
6. Erosion control plans.
7. Controls for other potential onsite storm water pollutants – including fuel and fuel storage.
8. Applicable specifications.
9. Maintenance and inspection procedures and forms.
10. Description of potential non-storm water discharges at site.
11. Notice of Intent (NOI) form.
12. Notice of Termination (NOT) form.
13. Contractor and Sub-contractor Certification forms.
14. Other record keeping forms and procedures.
15. Housekeeping Best Management Practices, including vehicle wash-down areas, protection of equipment storage and maintenance areas, and sweeping of roadways related to hauling activities.

PART 3 - EXECUTION

3.1 ENVIRONMENTAL PROTECTION

A. Protection of Natural Resources: Comply with applicable regulations and these specifications. Preserve the natural resources within the Project boundaries and outside the limits of permanent Work performed under this Contract in their existing condition or restore to an equivalent or improved condition as approved by the Contracting Officer.

B. Construction Zone: Arrange construction activities to minimize erosion to the maximum practical extent.

1. Clearing, excavation, and grading shall be limited to those areas of the project site necessary for construction. Minimize the area exposed and unprotected.
2. Clearly mark and delineate the limits of work activities.

3. Equipment shall not be allowed to operate outside the limits of work or to disturb existing vegetation.
4. Excavation and grading shall be completed during the dry season to the maximum extent possible

3.2 REGULATORY REQUIREMENTS

A. Permits: The Contractor shall obtain all required NPDES permits in a manner that results in no impacts to scheduled work. The Contractor shall account for the possibility of significant lead time in scheduling and executing the work.

1. Implement the requirements of the NPDES permit for erosion control due to storm water runoff during construction.
2. Implement all good housekeeping practices, inspections and record keeping.
3. Prior to construction, the Contractor and all subcontractors shall sign certifications (included in the SWPPP) that they understand the requirements of the NPDES permit.
4. All subcontractors shall comply with the requirements of the NPDES under the supervision of the Contractor.
5. The accepted SWPPP must comply with the terms and conditions of the EPA permit.

B. Notice of Intent (NOI): Contractor shall coordinate requirements for NOI with local jurisdiction. If applicable, Contractor shall file NOI.

C. Notice of Termination (NOT): After Substantial Completion of the construction project, file a Notice of Termination (NOT), if applicable.

D. CO Notification: The Contractor shall notify the Contracting Officer in writing and by telephone of the following events:

1. The required erosion and sediment control meeting/briefing.
2. Following installation of required sediment control structures.
3. Prior to removal of or modification to sediment control structures.
4. Prior to removal of all sediment control structures.

3.3 STORM WATER POLLUTION PREVENTION PLAN

A. Review and Acceptance: The Contractor and the Contracting Officer (CO) will jointly review the draft SWPPP and agree to any needed revisions. The Contractor shall incorporate all revisions, sign, and submit the final SWPPP to the Contracting Officer. The final SWPPP will be the document enforced on the project.

1. The accepted SWPPP will describe and ensure implementation of the practices which will be used to reduce the pollutants in storm water discharges.
2. The Contractor shall maintain a current copy of the SWPPP and all associated records and forms at the jobsite throughout the duration of the project.
3. The SWPPP shall be available at all times for public inspection and for the inspection and use of the CO.
4. Approval of Contractor’s Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations

B. Implementation: Implement the SWPPP as required throughout the construction period and maintain all erosion control elements in proper working order.

1. Do not perform clearing and grubbing or earthwork until the SWPPP has been implemented.

C. The SWPPP (including inspection forms) and all data used to complete the NOI shall be provided to the CO after Substantial Completion of the project.

3.4 SITE INSPECTIONS AND SWPPP REVISIONS

A. Inspections: The Contractor and the CO will perform a weekly inspection of the site.

1. The inspection shall include disturbed areas that have not been completely stabilized, areas used for storage of materials, locations where vehicles enter or exit the site, and all other erosion and sediment controls that are included in the Plan.
2. Inspections shall be documented on forms provided in the Plan.
3. The inspection forms shall be retained onsite in the Plan notebook throughout the construction period.

B. SWPPP Revisions: It may be necessary to revise the Plan during construction to make necessary improvements, revisions, or to respond to unforeseen conditions noted during construction or site inspections.

1. The Plan shall specify the mechanism whereby revisions may be proposed by the Contractor or the CO.
2. The Contractor and the CO will jointly review each revision to the SWPPP before changes are incorporated and implemented. The Contractor will then provide a revised copy of the SWPPP to the Contracting Officer.
3. Accepted modifications will be implemented within 7 calendar days following the date of the inspection when deficiencies or necessary corrections are first noted.

C. Negligence: Provide additional temporary erosion and pollution controls made necessary by Contractor's errors or negligence at no additional cost to the Government.

3.5 EROSION CONTROL MEASURES

A. Erosion control measures shall consist of any and all Best Management Practices (BMP's) for storm water discharges, including but not limited to silt fencing, barrier protectors, temporary soil retention blankets, excelsior drainage filters, sediment traps and berms. All BMP's must be in compliance with local authority having jurisdiction's requirements.

B. Berms and excelsior drainage filters shall be used to form sediment traps and to control run-on and run-off into other areas, including creeks, streams, marshes, access roads, well areas, and the staging areas.

C. Erosion control measures shall be used to contain only direct precipitation in the construction zone. The contained water shall be allowed to percolate into the ground or drain slowly through the drainage filter sediment traps.

D. Earthen sediment traps or holding ponds shall not be used unless accepted by the Contracting Officer.

E. Construct berms to reduce runoff velocity as well as direct surface runoff around and away from all fuel containment, storage, and borrow areas.

F. Divert surface runoff around and away from cut and fill slopes by constructing berms or ditches at the base of disturbed slopes. Provide conveyance for the runoff in temporary pipes or protected channels to temporary sediment traps.

G. Place drainage filters around all catch basins to create sediment traps to control run-off from the construction area.

H. Excess water used for dust control shall be contained within the demolition areas by the erosion control measures.

I. Temporary Measures: Temporary erosion and pollution control measures shall be used to correct conditions that develop during construction that were not foreseen during design.

1. Temporary silt fences shall be installed around any stockpiles and/or excavated material that cannot be backfilled during the same day in which it was excavated.
2. Silt fences, storm drain protection, and all other forms of erosion and sediment control shall be installed, inspected, and accepted by the Contracting Officer before beginning any utility excavation.
3. Silt fences shall be placed immediately downstream of any utility trench that has not been backfilled at the end of the working day.
4. Silt fences shall be installed prior to leaving the work site for the day.
5. Silt fences and storm drain protection shall be inspected by the Contractor weekly. Repairs to these devices shall be completed prior to leaving the work site for the day.
6. Failure to maintain silt fences and storm drain protection shall be cause for an immediate stop-work order.
7. Silt fences shall be removed with permission of the Contracting Officer within 20 working days after final acceptance of the project and/or after the establishment of permanent stabilization of all excavations and fill areas.

J. The Contractor shall prevent the deposition of materials onto paved areas. The Contractor shall inspect the paved areas for deposited materials weekly and remove the materials immediately.

K. Furnish, install, maintain, and operate necessary control measures and other equipment necessary to prevent erosion. Temporary measures shall be to Contractor's own design and Contractor shall be solely responsible for risks related to the management of erosion control during construction.

L. Before the work begins, sufficient equipment shall be available on the site to assure that the operation and adequacy of the erosion control system can be maintained.

3.6 EROSION CONTROL PRODUCTS

A. Erosion control products shall be in compliance with standards set by the local jurisdiction where the work is performed.

B. At a minimum, silt fence, super silt fence, rip rap, and sediment traps shall be utilized where applicable to control sediment laden runoff. Contractor shall coordinate best management practices with Contracting Officer.

C. If the project disturbs a large enough area to qualify for local jurisdiction erosion and sediment control permit, then the Contractor must prepare and obtain permit from governing jurisdiction.

3.7 MAINTENANCE OF TEMPORARY FACILITIES

A. Ensure erosion and sediment control structures remain effective throughout excavation and grading operations. Relocate structures as necessary.

B. Inspect control structures after each significant rainfall. Promptly repair breaches which occur.

C. The Contractor shall remove entrapped sediment from behind excelsior drainage filter after each storm.

3.8 SEDIMENT DISPOSAL

A. Sediment excavated from temporary sediment control structures shall be disposed on the site with general fill, or with topsoil. Sediment shall be allowed to dry out as required before reuse.

B. Contractor shall place the sediment removed from traps and other structures where it will not enter a storm drain or watercourse and where it will not immediately reenter the basin.

3.9 REMOVAL OF TEMPORARY STORM WATER POLLUTION CONTROL MEASURES

A. All temporary control measures shall be removed with permission of the Contracting Officer within 20 working days after final acceptance of the project, and/or once grading is completed and slopes have stabilized.

END OF SECTION 015723