

## STANDARD STABILIZATION NOTE

Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within:

1. Three (3) calendar days to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1).
2. Seven (7) days as to all other disturbed or graded areas on the project site.

The requirements of Section 3.5.a and 3.5.b do not apply to those areas on which actual construction activities are currently being performed or to interior areas as a surface mine site where the stabilization material would contaminate the recoverable resource. Maintenance of erosion and sediment control practices and devices shall be performed as necessary to ensure that the disturbed areas continuously meet the appropriate requirements of the Standards and Specifications and that runoff from these areas does not adversely impact downstream properties.

## STANDARD SEDIMENT CONTROL PLAN FOR UTILITIES

1. Only enough trench will be excavated that can be backfilled and stabilized daily.
2. Excavated trench materials shall be placed on the high side of the trench.
3. Immediately following pipe installation, the trench shall be backfilled, compacted and stabilized by the end of each working day.
4. Full trench compaction is required.
5. Construct Stabilized Construction Entrances at all ingress and egress points to the site onto paved roads.
6. Silt fence shall be installed temporarily immediately downstream of any disturbed area intended to remain disturbed longer than one working day. Also, any inlet located below the effected area of the disturbance shall be protected using the appropriate inlet protection detail.
7. Staging areas for equipment and supplies shall be protected with silt fence, ends curled uphill by 2' in elevation, for containment.
8. Any sediment control practices which are disturbed during utility construction shall be repaired or replaced by the end of each working day.
9. Any ditches or drainage ways disturbed during construction must be restored to original condition.

## STANDARD EROSION AND SEDIMENT CONTROL NOTES

3. The contractor shall notify the Water Management Administration (WMA) at (410) 537-3510 seven (7) days before commencing any land disturbing activity and, unless waived by the Administration, shall be required to hold a pre-construction meeting between project representatives and a representative of WMA.

2. The contractor shall notify WMA in writing and by telephone at the following points:

  - The required pre-construction meeting.
  - Following installation of sediment control measures.
  - During the installation of sediment basins (to be converted into permanent stormwater management structures) at the required inspection points (see Inspection Checklist on plan). Notification prior to commencing construction of each step is mandatory.
  - Prior to removal or modification of any sediment control structure(s).
  - Prior to removal of all sediment control devices.
  - Prior to final acceptance.

3. The contractor shall construct all erosion and sediment control measures per the approved plan and construction sequence and shall have them inspected and approved by the agency inspector or WMA Inspector prior to beginning any other land disturbances. Minor sediment control device location adjustments may be made in the field with the approval of the WMA Inspector. The contractor shall ensure that all runoff from disturbed areas is directed to the sediment control devices and shall not remove any erosion or sediment control measure without prior permission from WMA Inspector and agency inspector. The contractor must obtain prior agency and WMA approval for changes to the Sediment Control Plan and / or Sequence of Construction.

4. The contractor shall protect all points of construction ingress and egress to prevent the deposition of materials onto public roads. All materials deposited onto public roads shall be removed immediately.

5. The contractor shall inspect daily and maintain continuous in an effective operating condition all erosion and sediment control measures until such times as they are removed with prior permission from WMA Inspector and agency inspector.

6. All sediment basins, trap embankments and slopes, perimeter dikes, swales and all disturbed slopes steeper or equal to 3:1 shall be stabilized with sod or seed and anchored straw mulch, or other approved stabilization measures, as soon as possible but no later than seven (7) calendar days after establishment. All areas disturbed outside of the perimeter sediment control system must be minimized. Maintenance must be performed as necessary to ensure continued stabilization. (Requirement for stabilization may be reduced to three (3) days for sensitive areas.)

7. The contractor shall apply sod or seed and anchored straw mulch, or other approved stabilization measures to all disturbed areas and stockpiles within fourteen (14) calendar days after stripping and grading activities have ceased in the area. Maintenance shall be performed as necessary to ensure continued stabilization. (Requirement may be reduced to seven (7) days for sensitive areas.)

8. Prior to removal of sediment control measures, the contractor shall stabilize and have established permanent stabilization for all contributory disturbed areas using sod or an approved permanent seed mixture with required soil amendments and an approved anchored mulch. Wood fiber mulch may only be used in seeding season where the slope does not exceed 10% and grading has been done to promote sheet flow drainage. Areas brought to finished grade during the seeding season shall be permanently stabilized as soon as possible, but not later than fourteen (14) calendar days after establishment. When property is brought to finished grade through the months of November through February, and permanent stabilization is found to be impractical, temporary seed and anchored straw mulch shall be applied to disturbed areas. The final permanent stabilization of such property shall be applied by March 15 or earlier if ground and weather conditions allow.

9. The site's approval letter, approved Erosion and Sediment Control Plans, daily log books, and test reports shall be available at the site for inspection by duly authorized officials of WMA and the agency responsible for project.

10. Surface drainage flows over unstabilized cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing protective devices to lower the water downslope without causing erosion. Dikes shall be installed and maintained at the top of a cut or fill slope until the slope and drainage area to it are fully stabilized, at which time they must be removed and final grading done to promote sheet flow drainage. Protective methods must be provided at points of concentrated flow where erosion is likely to occur.

11. Permanent swales or other points of concentrated water flow shall be stabilized with sod or seed with an approved erosion control matting, rip-rap, or by other approved stabilization measures.

12. Temporary sediment control devices may be removed, with permission of WMA Inspector and agency inspectors, within thirty (30) calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be converted to the permanent configuration within this time period as well.

13. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas. A slope gradient of up to 2:1 will be permitted in nonmaintenance areas provided that those areas are indicated on the erosion and sediment control plan with a low-maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetative stabilization.

14. For finished grading, the contractor shall provide adequate gradients to prevent water from ponding for more than twenty four (24) hours after the end of a rainfall event. Drainage courses and swale flow areas may take as long as forty-eight (48) hours after the end of a rainfall event to drain. Areas designed to have standing water shall not be required to meet this requirement.

15. Sediment traps or basins are not permitted within 20 feet of a foundation that exists or is under construction. No structure may be constructed within 20 feet of an active sediment trap or basin.

16. The contractor shall have the option of requiring additional safety or sediment control measures, if deemed necessary.

17. All trap depth dimensions are relative to the outlet elevation. All traps must have a stable outfall. All traps and basins shall have stable inflow points.

18. Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control. Refer to appropriate specifications for temporary seeding, permanent seeding, mulching, sodding, and ground covers.

19. Sediment shall be removed and the trap or basin restored to its original dimensions when the sediment has accumulated to one quarter of the total depth of the trap or basin. Total depth shall be measured from the trap or basin bottom to the crest of the outlet.

20. Sediment removed from traps (and basins) shall be placed and stabilized in approved areas, but not within a floodplain, wetland or tree-save area. When pumping sediment laden water, the discharge must be directed to a sediment trapping device prior to release from the site. A sump pit may be used if sediment traps themselves are being pumped out.

21. All water removed from excavated areas shall be passed through a WMA approved dewatering practice or pumped to a sediment trap or basin prior to discharge to a functional storm drain system or to stable ground surface.

22. Sediment control for utility construction for areas outside of designed controls or as directed by engineer or WMA Inspector: A. Call "Miss Utility" at 1-800-257-7777 48 hours prior to the start of work. B. Excavated trench material shall be placed on the high side of the trench. C. Trenches for utility installation shall be backfilled, compacted, and stabilized at the end of each working day. No more trench shall be opened than can be completed the same day, unless: D. Temporary silt fence shall be placed immediately downstream of any disturbed area intended to remain disturbed for more than one day.

23. Where deemed appropriate by the engineer or inspector, sediment basins and traps may need to be surrounded with an approved safety fence. The fence must conform to local ordinances and regulations. The developer or owner shall check with local building officials on applicable safety requirements. Where safety fence is deemed appropriate and local ordinances do not specify fencing sizes and types, the following shall be used as a minimum standard: The safety fence must be made of welded wire and at least 42 inches high, have posts spaced no farther apart than 8 feet, have mesh openings no greater than 2 inches in width and 4 inches in height with a minimum of 14 gauge wire. Safety fence must be maintained and in good condition at all times.

24. Off-site spoil or borrow areas on State or federal property must have prior approval by WMA and other applicable State, federal, and local agencies; otherwise approval must be granted by the local authorities. All waste and borrow areas off-site must be protected by sediment control measures and stabilized.

25. Sites where infiltration devices are used for the control of stormwater, extreme care must be taken to prevent runoff from unstabilized areas from entering the structure during construction. Sediment control devices placed in infiltration areas must have bottom elevations at least two (2) feet higher than the finish grade bottom elevation of the infiltration practice. When converting a sediment trap to an infiltration device, all accumulated sediment must be removed and disposed of prior to final grading of infiltration device.

26. When a storm drain system outfall is directed to a sediment trap or sediment basin and the system is to be used for temporarily conveying sediment laden water, all storm drain inlets in non-sump areas shall have temporary asphalt berms constructed at the time of base paving to direct gutter flow into the inlets to avoid surcharging and overflow of inlets in sump areas.

27. Site information.

a. Total Area of Facility	364.5 ±	Acres
b. Area Disturbed	1.29	Acres
c. Area to be Roofed or Paved	.60	Acres
d. Total Cut	1,160	Cubic Yards
e. Total Fill	3,242	Cubic Yards
f. Off-site Waste / Borrow Area Location	N/A	

## SEQUENCE OF CONSTRUCTION

  - PRIOR TO THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) ENFORCEMENT DIVISION, (410) 537-3510, MINIMUM OF SEVEN (7) CALENDAR DAYS PRIOR TO THE START OF WORK AND HOLD A PRE-CONSTRUCTION CONFERENCE:
    - WHEN CONTRACTOR INTENDS TO BEGIN CONSTRUCTION;
    - SOURCE OF BORROW MATERIAL;
    - DISPOSAL SITE AREA WITH APPROVAL CERTIFICATION;
    - CONTRACTOR'S TENTATIVE CLOSING DATE.
  - PROVIDE SURVEY AND LAYOUT OF THE LIMIT OF DISTURBANCE (LOD) AND EROSION & SEDIMENT CONTROL (ESC) DEVICES. THE LOD MUST BE FIELD-MARKED AND THE ORANGE HIGH VISIBILITY TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO AND INSPECTED AT THE PRE-CONSTRUCTION MEETING.
  - CONDUCT ON-SITE PRE-CONSTRUCTION MEETING WITH ALL PARTIES TO DISCUSS ISSUES INCLUDING, BUT NOT LIMITED TO, WAYS AND MEANS AND LIMITS OF RESPONSIBILITIES AND WORK, INSPECT THE SITE FOR ANY UNFORESEEN CONDITIONS, AND STORMWATER MANAGEMENT CERTIFICATION PROCEDURES.
  - SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR WMA INSPECTOR:
    - CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK.
    - EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
    - TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED, AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY, UNLESS;
    - TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN FOR MORE THAN ONE DAY.
  - CONTRACTOR SHALL MARK OFF THE PROPOSED TEMPORARY STAGING AREA. THIS AREA MUST BE PROTECTED WITH TEMPORARY CONSTRUCTION FENCING AROUND THE ENTIRE PERIMETER. CONTRACTOR MUST REMOVE ALL DEMOLISHED & EXCAVATED MATERIALS FROM THE SITE TO AN APPROVED DISPOSAL / RECYCLING FACILITY AT THE END OF EACH WORK DAY. STOCKPILING OF REMOVED EXCESS MATERIALS / WASTES / SOILS WILL NOT BE ALLOWED IN THE STAGING AREA.
  - INSTALL TEMPORARY CONSTRUCTION FENCE AROUND WORK SITE AND SIGNAGE TO WARN / DETOUR PEDESTRIAN AND VEHICULAR TRAFFIC.
  - WITH THE PERMISSION OF THE MDE INSPECTOR, BEGIN INSTALLATION OF ESC MEASURES. INSTALL EROSION & SEDIMENT CONTROL DEVICES INCLUDING, BUT NOT LIMITED TO, SUPER SILT FENCE, STONE CONSTRUCTION ENTRANCE, AND AT GRADE INLET PROTECTION.
  - BEGIN CLEARING AND GRUBBING ALL VEGETATED AREAS WITHIN THE LIMITS OF DISTURBANCE. REMOVE ALL TREES INDICATED ON THE DEMOLITION PLAN.
  - REMOVE DRAINAGE PIPING, TELEPHONE LINE, AND ANY OTHER UNDERGROUND UTILITY SLATED FOR DEMOLITION. SEE PLANS. EXISTING STORM DRAIN STRUCTURES SHALL REMAIN ACTIVE AND PROTECTED WITH APPROPRIATE SEDIMENT CONTROL DEVICES.
  - INSTALL TEMPORARY SHORING ON AS REQUIRED BY THE GOVERNMENT WHERE REQUIRED.
  - WITH THE PERMISSION OF THE MDE INSPECTOR, BEGIN CONSTRUCTION OF CONSTRUCTION EVENTS SUCH AS BUT NOT LIMITED TO EXCAVATION OF AND REMOVAL OF EXISTING CONCRETE FOUNDATION, EXCAVATION FOR BUILDING FOOTINGS, BUILDING CONSTRUCTION, PROCESS PIPING AND UTILITY INSTALLATIONS, GRADING FOR NEW PAVEMENT AREA, INSTALLATION OF FUEL STORAGE STRUCTURES, INSTALLATION OF SEGMENTED BLOCK RETAINING WALL, INSTALLATION OF MICRO-BIORETENTION BASIN, AND FINAL GRADING TO BE COORDINATED WITH THE CONTRACTOR AND THE GOVERNMENT. MAINTAIN SEDIMENT CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
  - UPON COMPLETION OF CONSTRUCTION, AND WITH THE PERMISSION OF THE MDE INSPECTOR, PROVIDE PERMANENT STABILIZATION OF THE SITE AND, WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES. FINE GRADE, SEED, AND MULCH AREAS DISTURBED IN REMOVAL.
  - SUBMIT STORMWATER MANAGEMENT AS-BUILT CERTIFICATION TO MDE.

PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL  
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,  
LICENSE NO. 19708, EXPIRATION DATE: 07/13/16

**MDE PROJECT #**  
**MDE 16-SF-0134**

**CONTRACTORS NOTE:**  
**EROSION AND SEDIMENT CONTROL WILL BE STRICTLY ENFORCED**

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WILL BE STRICTLY ENFORCED

100% Bid Documents, September 1, 2015

<b>Fully Sprinklered</b>	
<i>Additions:</i>	<i>Date:</i>
<i>Revisions:</i>	
<b>ADDENDUM #1</b>	<b>6-14-16</b>

**DCS Infrastructure, LLC**  
3249 route 112, building 4 suite 1B  
Medford, N.Y. 11763 631-320-1706

 Hatch Mott  
MacDonald



Approved:	

Approved: Chief, Facilities and Engineering:
Approved: Associate Chief for Maintenance And Operations, Perry Point:
Approved: Engineering Projects Supervisor
Approved: Infection Control Officer

Drawing Title:
<b>SOIL EROSION AND SEDIMENT CONTROL DETAILS AND NOTES</b>
Approved: Associate Director for Operations:
Approved: Director, Medical Center:

Project Title: <b>POTABLE WATER SYSTEM IMPROVEMENTS - TIER 1</b> PERRY POINT MD VAMC			
Scale:	Building No:	Checked:  KDG	Drawn:  PB
Location: VAMC PERRY POINT, MD 21902			

Date:  
9/1/2015

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Project No:  
512A5-13-329

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DRAWING NO:  
E&SC-002

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