

STANDARD EROSION AND SEDIMENTATION POLLUTION CONTROL NOTES

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE
- CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A
- PRECONSTRUCTION MEETING. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES. OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE

- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE
- DEPARTMENT PRIOR TO IMPLEMENTATION. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES
- SHALL BE 2H: 1V OR FLATTER. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND OR THE REGIONAL OFFICE OF THE DEPARTMENT
- . ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THIS SITE. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY
- THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO 2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING
- 13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP
- SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS. 4. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. THE OPERATOR WILL MAINTAIN AND MAKE AVAILABLE TO NORTHAMPTON COUNTY CONSERVATION DISTRICT COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED
- 5. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION
- 6. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. . ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
- 8. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- 19. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- 20. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS 21. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- 22. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. 23. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- 24. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD. 25. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE
- VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN. 26. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR OTHER PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1
- YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS. 7. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE
- CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR MOTHER MOVEMENTS. 28. EROSION AND SEDIMENT BMPS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMPS. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 29. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
- O. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 1. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION. 2. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN
- RUNOFF FROM LEAVING THE CONSTRUCTION SITE OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 33. IN THE EVENT OF SINKHOLE DISCOVERY A PROFESSIONAL GEOLOGIST OR ENGINEER WILL BE CONTACTED CONCERNING MITIGATION. ADDITIONALLY, THE NORTHAMPTON COUNTY CONSERVATION DISTRICT WILL BE MADE AWARE OF THE SINKHOLE DISCOVERY 34. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL
- PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. 35. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS F THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C. PROTECTION OF NATURAL RESOURCES. ARTICLE III. WATER RESOURCES. CHAPTER 102. EROSION CONTROL. 36. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A
- NUMBERED SYMBOL NOT A NOTE.) 7. AT STREAM CROSSINGS, 50' BUFFÉR AREAS SHOULD BE MAINTAINED. ON BUFFERS. CLEARING, SOD DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RAINWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.
- 38. ALL WETLANDS MUST BE DELINEATED AND PROTECTED WITH ORANGE SAFETY FENCE PRIOR TO ANY FARTHMOVING ACTIVITY 39. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

NOI CHECKLIST NOTES (HQ):

- TO OUR KNOWLEDGE, THERE ARE NOT NATURALLY OCCURRING GEOLOGIC FORMATIONS OR SOIL CONDITIONS THAT MAY HAVE THE POTENTIAL TO CAUSE POLLUTION DURING EARTH DISTURBANCE ACTIVITIES. 2. THE EXTENT OF PAVED ROADWAYS, DRIVEWAYS AND ROOF AREAS PRESENT POTENTIAL THERMAL IMPACTS TO SURFACE
- WATERS, THEREFORE, TREES ADJACENT TO PAVED AREAS AND INFILTRATION ARE PROPOSED THROUGHOUT THE PROJECT TO LESSEN THE IMPACT.
- 3. THE E&SPC PLANS HAVE BEEN PLANNED AND DESIGNED TO BE CONSISTENT WITH THE POST—CONSTRUCTION STORMWATER MANAGEMENT PLANS, THEREFORE THIS PLAN PREVENTS INCREASED RUNOFF. 4. THERE ARE NO EXISTING NOR PROPOSED RIPARIAN FOREST BUFFERS RELATED TO THIS PROJECT. THEREFORE THERE ARE NO WAIVER REQUESTS, AREAS PROPOSED TO BE WAIVED OR RIPARIAN BUFFER OFFSETS.
- BY CONSTRUCTING ON ONLY A PORTION OF THE ENTIRE SITE, THE EXTENTS OF EARTH DISTURBANCE ARE MINIMIZED. . THE DURATION OF EARTH DISTURBANCE IS MINIMIZED BY EMPLOYING IMMEDIATE STABILIZATION PRACTICES PER THE SEQUENCE OF CONSTRUCTION.
- SOIL COMPACTION IS MINIMIZED ON THE SITE BY LIMITING THE EXTENTS AND LIMITS OF EARTH DISTURBANCE. 8. BY IMPLEMENTING THIS PLAN, THE DESIGN PROFESSIONAL STATES THAT THERE IS NO NET INCREASE IN VOLUME OR RATE. THEREFORE WE ARE PRESERVING THE INTEGRITY OF THE STREAM CHANNELS AND MAINTAIN AND PROTECT THE PHYSICAL BIOLOGICAL AND CHEMICAL QUALITIES OF THE RECEIVING STREAM AND MAXIMIZE THE PROTECTION OF THE EXISTING DRAINAGE FEATURES AND VEGETATION.
- 9. THE BULK EARTHMOVING AND UTILITY CONSTRUCTION FOR THIS SUBDIVISION HAS BEEN COMPLETED AND STABILIZED ALTHOUGH THE PROPOSED INFILTRATION BASIN IS WITHIN AN AREA TO BE GRADED, THE GRADING ONLY TAKES PLACE TO CONVERT THE EXISTING SEDIMENT BASIN TO THE FINAL CONFIGURATION. INFILTRATION WITHIN THE BASIN WILL OCCUR IN
- VIRGIN SOIL 10. THERE ARE NO ALTERNATIVES TO THE PROPOSED IMPERVIOUS SURFACES, I.E. HOUSES AND DRIVEWAYS. THE PLAN PROPOSES
- TO LEAVE AS MUCH AREA UN-DISTURBED AS POSSIBLE. 11. THERE ARE NO WETLANDS ADJOINING OR WITHIN THE SITE.

KARST MITIGATION PLAN:

1. WATER-TIGHT GASKETS SHALL BE PROVIDED AT THE JOINTS FOR ALL UNDERGROUND PIPING TO PREVENT LEAKAGE

- 2. ROOF LEADERS SHALL DISCHARGE DIRECTLY TO THE STORMWATER SYSTEM AND NOT THE GROUND SURFACE. 3. SITE GRADING SHALL BE DESIGNED TO CARRY SITE RUNOFF AWAY FROM THE STRUCTURES.
- 4. PAVEMENT CURBS AND CATCH BASINS SHALL BE SEALED. 5. STORMWATER MANAGEMENT BASINS SHALL BE LINED WITH A

SYNTHETIC LINER.

- CONSTRUCTION REQUIREMENTS:

 1. POSITIVE SURFACE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND STANDING WATER SHALL NOT BE
- ALLOWED TO ACCUMULATE. 2. THE STORMWATER MANAGEMENT SYSTEM SHALL BE CONSTRUCTED AS SOON AS PRACTICALLY POSSIBLE. THIS WILL ALLOW FOR THE CONTROLLED DRAINAGE OF SURFACE RUNOFF DURING CONSTRUCTION
- AND MINIMIZE PONDING. 3. EXCAVATIONS SHALL BE BACKFILLED AS SOON AS PRACTICAL TO MINIMIZE THE POTENTIAL FOR AN UNCONTROLLED FLOW OF WATER DUE TO PONDING IN AN EXCAVATION. WHERE AN EXCAVATION MUST REMAIN OPEN DURING A RAIN EVENT, DEWATERING SHALL BE PROVIDED TO MAINTAIN DRY EXCAVATIONS.

STANDARD CONSTRUCTION DETAIL #4-6

FIRMLY ANCHORE

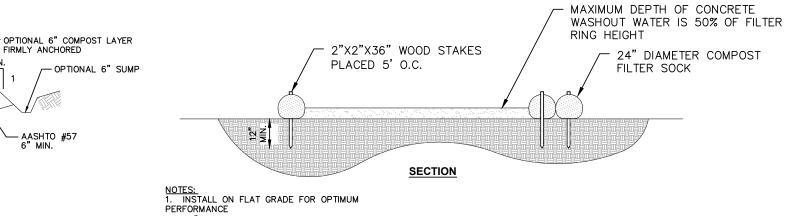
Rock Filter Outlet

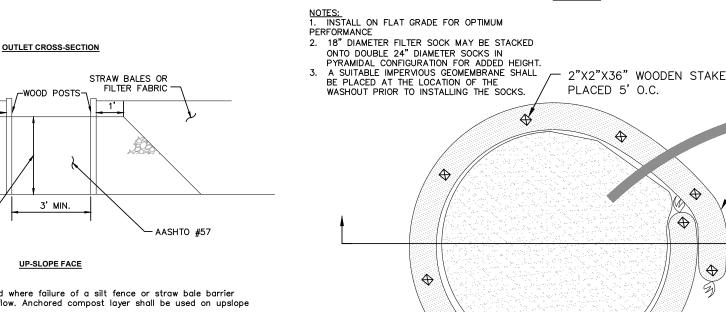
— COMPACTED LOW PERMEABILITY GROUND SURFACE-STRUCTURAL FILL (USCS: CL OR CH) LIMITS OF SINKHOLE - RESIDUAL SOIL CONCRETE PLUG ROCK ROCK SINKHOLE REPAIR DETAIL

- NOTES:

 1. SINKHOLES ENCOUNTERED DURING CONSTRUCTION SHOULD BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE GEOTECHNICAL ENGINEER. 2. OVER-EXCAVATE LOOSE SOIL AND ROCK FROM THROAT OF SINKHOLE UNTIL STABLE ROCK OR 3. PLACE LOW SLUMP CONCRETE INTO THROAT TO FORM A PLUG. CONCRETE SHOULD EXTEND A
- MINIMUM OF 3' FROM THE BOTTOM OF OVER-EXCAVATION. 4. FOLLOWING CONCRETE CURING, BACKFILL REMAINDER OF EXCAVATION W/ LOW PERMEABILITY COMPACTED STRUCTURAL FILL MEETING USCS DESIGNATION OF CL OR CH. BACKFILL SHOULD BE PLACED IN 8" LOOSE LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER ASTM
- 5. PROVIDE POSITIVE DRAINAGE AWAY FROM SINKHOLE REPAIR AREA BY OVERFILLING, IF 6. ALTERNATIVE METHODS OF REPAIR MAY BE DEVELOPED BY THE GEOTECHNICAL ENGINEER BASED

FIGURE 3.18 TYPICAL COMPOST SOCK WASHOUT INSTALLATION





A rock filter outlet shall be installed where failure of a silt fence or straw bale barrier has occurred due to concentrated flow. Anchored compost layer shall be used on upslope face in HQ and EV watersheds. Sediment shall be removed when accumulations reach 1/3 the height of the outlet.

0.7 Staples per SQ.YD.

1.7 Staples per SQ.YD.

5401 St. Wendel - Cynthiana Rd. PH: 800-722-20 Poseyville, IN 47633 PH: 800-722-20 www.nagreen.c

HEIGHT OF ROCK

FILTER = 5/6 HEIGHT

OF STRAW BALES OR .

2"X2"X36" WOODEN STAKES 24" DIAMETER COMPOST FILTER SOCK, 4" MIN. OVERLAP ON UPSLOPE

SIDE OF FILTER RING

STAPLE PATTERN GUIDE 4:1 Slopes (A) 3:1 Slopes (B) 2:1 Slopes (C) 1:1 & Steeper Slopes (D) 1.15 Staples per SQ.YD Medium/High Flow Channel (High Flow Channel And 20"(0.5m) --- 10"(25cm **δ** Ο <u>φ</u> Ο 0 0 0 d 3.4 Staples per SQ.YD. 3.75 Staples per SQ.YD. Use ECMDS for more accurat The information presented herein is general design information only. For specific applications

Drawing Not To Scale

INSTALL BEGINNING OF ROLL IN 6"x6" ANCHOR TRENCH, STAPLE, BACKFILL AND COMPACT SOIL. BLANKET EDGES OVERLAPPED 4" (MIN.) AND STAPLED STARTING AT TOP OF SLOPE, ROLL BLANKETS IN DIRECTION OF WATER FLOW PREPARE SEED BED INCLUDING APPLICATION OF LIME, FERTILIZER, & SEED) PRIOR TO INSTALLATION OF REFER TO MANUFACTURER'S RECOMMENDED STAPLING PATTERN FOR STEEPNES AND LENGTH OF SLOPE BEING BLANKETED THE BLANKET SHOULD NOT BE STRETCHED; IT MUST MAINTAIN GOOD SOIL

STANDARD CONSTRUCTION DETAIL #11-1

Erosion Control Blanket Installation

STANDARD CONSTRUCTION DETAIL #4-1

Compost Filter Sock

DISTURBED

UNDISTURBED AREA

Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of

Compost Filter Sock shall be placed at existing level grade. Both ends of the sock shall

be extended at least 8 feet up slope at 45 degrees to the main sock alignment (Figure 4.1). Maximum slope length above any sock shall not exceed that shown on Figure 4.2.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.

Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after

Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock

5 MIL HDPE

3/8"

26 PSI

9 MONTHS

TWO-PLY SYSTEMS

OUTER FILTRATION MESH

MECHANICALLY FUSED VIA NEEDLE PUNCH)

3/16" MAX. APERTURE SIZE

SOCK FABRICS COMPOSED OF BURLAP MAY BE USED ON PROJECTS LASTING 6 MONTHS OR LESS

TABLE 4.2 COMPOST STANDARDS

IF CERTIFIED FILTREXX INSTALLER IN NOT UTILIZED, COMPOST

CONSERVATION DISTRICT FOR APPROVAL PRIOR TO PLACEMENT

COMPOST FILTER SOCK PROVIDER INFORMATION:

TEST RESULTS WILL NEED TO BE PROVIDED TO THE

FILTREXX INTERNATIONAL, LLC

GRAFTON, OH 44044

1-440-926-2607

IN THE FIELD.

WWW.FILTREXX.COM

35481 GRAFTON EASTERN ROAD

TABLE 4.1
COMPOST SOCK FABRIC MINIMUM SPECIFICATIONS

DEGRADABLE

3/8"

26 PS

6 MONTH

may be left in place and vegetated or removed. In the latter case, the mesh shall be

Socks shall be inspected weekly and after each runoff event. Damaged socks shall be

repaired according to manufacturer's specifications or replaced within 24 hours of

1 year. Polypropylene socks shall be replaced according to manufacturer's

DEGRADABLE DEGRADABLE

Stakes may be installed immediately downslope of the sock if so specified by the

Traffic shall not be permitted to cross filter socks.

cut open and the mulch spread as a soil supplement.

3 MIL HDPE

3/8"

6 MONTHS

INNER CONTAINMENT NETTING

OUTER FILTRATION MESH

CHARACTERISTICS

OPENINGS

STRENGTH

ORIGINAL STRENGTH

MINIMUM

FUNCTIONA

(ASTM-G-155)

BLOWN/PLACED FILTER MEDIA-

DISTURBED AREA

EXISTING CONTOURS

-2"x2" WOODEN STAKES PLACED 10' OC.

UNDISTURBED AREA

2"x2" WOODEN STAKES

OLYPROPYLENE MULTI-FILAMEN

(HDMFPP)

DEGRADABLI

1/8"

202 PSI

AT 1000 HR

2 YEARS

(MFPP)

DEGRADABLE

3/8"

44 PSI

100% T 1000 HR

I YEAR

FUSION WELDED JUNCTURES
3/4" x 3/4" MAX. APERTURE SIZE
COMPOSITE POLYPROPYLENE FABRIC

(WOVEN LAYER AND NON-WOVEN FLEECE

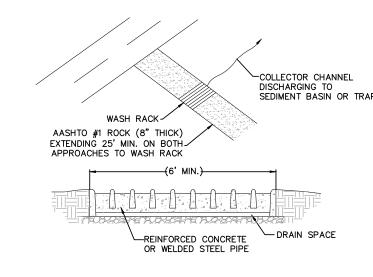
- COMPOST FILTER SOCK

Seed and soil amendments shall be applied according to the rates in the plan drawings prior to installing Provide anchor trench at toe of slope in similar fashion as at top of slope.

Slope surface shall be free of rocks, clods, sticks, and grass. Blanket shall have good continuous contact with underlying soil throughout entire length. Lay blanket loosely and stake or staple to maintain direct contact with soil. Do not stretch blanket. The blanket shall be stapled in accordance with the manufacturer's recommendations

Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 70% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 4 calendar days.

STANDARD CONSTRUCTION DETAIL #3-2 **Rock Construction Entrance with Wash Rack**

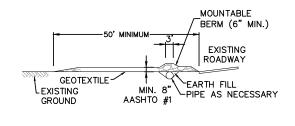


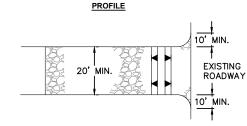
Wash rack shall be 20 feet (min.) wide or total width of access. Wash rack shall be designed and constructed to accommodate anticipated

A water supply shall be made available to wash the wheels of all vehicles exiting

MAINTENANCE: Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile of rock material shall be maintained on site for this purpose. Drain space under wash rack shall be kept open at all times. Damage to the wash rack shall be repaired prior to further use of the rack. All sediment deposited on roadways shall be removed and returned to the construction site immediately. Washing the roadway or sweeping the deposits into roadway ditches, sewer, culverts, or other drainage

STANDARD CONSTRUCTION DETAIL #3-1 Rock Construction Entrance





* MOUNTABLE BERM USED TO PROVIDE COVER FOR PIPE

PLAN VIEW

Remove Topsoil prior to installation of rock construction entrance. Extend rock over full width of entrance. Runoff shall be diverted form roadway to a suitable sediment removal bmp prior to entering Rock Construction Entrance Mountable berm should be installed wherever optional culvert pipe is used. Pipe to be sized appropriately for size of ditch being crossed MAINTENANCE: Rock Construction Entrance thickness shall be constantly

aintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. All sediment deposited on paved roadways shall be removed and returned to the construction site immediately. If excessive amounts of sediment are being deposited on roadway, extend length of rock construction entrance by 50 feet increments until condition is alleviated or install wash rack. Washing the roadway or sweeping the deposits into roadway ditches, sewer, culverts, or other drainageways is not acceptable.

STANDARD CONSTRUCTION DETAIL #3-16 Pumped Water Filter Bag

WELL VEGETATED, GRASSY AREA DISCHARGE HOSE FILTER BAG INTAKE HOSE-HEAVY DUTY LIFTING STRAPS (RECOMMENDED) PLAN VIEW

WELL VEGETATED, GRASSY AREA DISCHARGE HOSE **ELEVATION VIEW** Low volume filter bags shall be made from non-woven geotextile material sewn with high strength, double stitched "J" type seams. They shall be capable of trapping particles larger than 150 microns. High volume filter bags shall be made from woven geotextiles

hat meet the following standards:
 Property
 Test Method
 Minimum Stand

 Avg. Wide Width Strength
 ASTM D-4884
 60 lb/in

 Grab Tensile
 ASTM D-4632
 205 lb

 Puncture
 ASTM D-4833
 110 lb

 Mullen Burst
 ASTM D-3786
 350 psi

 UV Resistance
 ASTM D-4355
 70%

 AOS % Resistance
 ASTM D-4751
 80 Sieve

FILTER BA

A suitable means of accessing the bag with machinery required for disposal purposes shall be provided. Filter bags shall be replaced when they become 1/2 full of sediment. Spare bags shall be kept available for replacement of those that have failed or are filled. Bags shall b placed on straps to facilitate removal unless bags come with lifting straps already attached Bags shall be located in well-vegetated (grassy) area, and discharge onto stable, erosion resistant areas. Where this is not possible, a geotextile underlayment and flow path shall be provided. Bags may be placed on filter stone to increase discharge capacity. Bags shall not be placed on slopes greater than 5%. For slopes exceeding 5%, clean rock or other non—erodible and non—polluting material may be placed under the bag to reduce slope

No downslope sediment barrier is required for most installations. Compost berm or compost filter sock shall be installed below bags located in HQ or EV watersheds, within 50 feet of receiving surface water or where grassy area is not available The pump discharge hose shall be inserted into the bags in the manner specified by the manufacturer and securely clamped. A piece of PVC pipe is recommended for this purpose. The pumping rate shall be no greater than 750 gpm or 1/2 the maximum specified by the manufacturer, whichever is less. Pump intakes shall be floating and screened. Filter bags shall be inspected daily. If any problem is detected, pumping shall cease immediately and not resume until the problem is corrected

CONTRACTOR SHOULD CONSIDER SURFACE ROUGHENING THAT IS APPLIED TO 3H:1V OR STEEPER SLOPES UNLESS A STABLE ROCK FACE IS PROVIDED OR IT CAN BE SHOWN THAT THERE IS NOT A POTENTIAL FOR SEDIMENT POLLUTION TO LEAVE THE SITE.

TEMPORARY SEEDINGS FOR CRITICAL AREAS ADAPTATION TO SOIL-SITE CONDITIONS IN LBS. PER TYPE OF COVER PERCENT SEEDING DATES SPECIES OR MIXTURE ACRE 1 20 TO 40 3/1 TO 6/15 X X X X X X ANNUAL RYEGRASS | 100%

FIELD BROMEGRASS 100% 1 20 TO 40 8/15 TO 9/15 X X X X

NOTES: 1. PENNDOT FORMULA E MAY BE SUBSTITUTED FOR TEMPORARY SEEDING WITH THE APPROVAL OF THE OWNSHIP ENGINEER. ALL WORK, INCLUDING MAINTENANCE, SHALL BE IN ACCORDANCE WITH SECTION 804 OF PENNDOT PUB. 408 SPECIFICATIONS.

10-10-10 @ 500 LBS/PER ACRE, AND WORK IN WHERE POSSIBLE. 3. APPLY STRAW MULCH AT A RATE OF THREE (3) TONS PER ACRE.
 4. TEMPORARY STABILIZATION SHALL OCCUR WHEN CESSATION OF EARTH DISTURBANCE ACTIVITIES WILL EXCEED 4 DAYS.

2. APPLY ONE (1) TON OF AGRICULTURAL-GRADE LIMESTONE PER ACRE, PLUS FERTILIZER AT THE RATE OF

100% | 2.5 | 96 | 3/1 TO 6/15 | X | X | X | X | X

100% 3.5 140 8/15 TO 10/15 X X X X X

100% 1 30 TO 40 5/15 TO 8/15 X X X X

85 3/1 TO 6/15 X X

PERMANENT SEEDING NOTES

SUDANGRASS

WINTER RYE

PERMANENT STABILIZATION OF ALL EXPOSED EARTH SURFACES AFTER THE COMPLETION OF THE SITE GRADING AND IMPROVEMENTS SHALL BE ACCOMPLISHED BY THE FOLLOWING METHODS AND MATERIALS: AFTER INSTALLATION OF THE NEEDED SURFACE WATER CONTROL MEASURES, PERFORM ALL CULTIVATION

- OPERATIONS AT RIGHT ANGLES TO THE SLOPE.

 SPREAD AND FINE GRADE 4" TOPSOIL ON ALL AREAS TO BE PERMANENTLY SEEDED.

 APPLY LIME AT THE RATE OF SIX (6) TONS LIMESTONE PER ACRE (240 LBS. PER 1,000 SQUARE FEET).

 WORK IN FERTILIZER TO TOP 4" OF SOIL AT THE RATE OF 1000 LBS. OF 10-20-20 OR EQUIVALENT PER ACRE.

 SMOOTH AND FIRM SEEDED AREAS WITH CULTIPACKER, OR OTHER SIMILAR EQUIPMENT, PRIOR TO SEEDING.
- APPLY SEED.

 COVER GRASS SEEDS WITH 1/4 INCH OF TOPSOIL WITH SUITABLE EQUIPMENT.

 INSTALL EROSION CONTROL BLANKETS WHERE INDICATED ON THE PLANS AND APPLY STRAW MULCH AT A RATE
 OF THREE (3) TONS PER ACRE OVER ALL REMAINING DISTURBED AREAS.

 WATER AND MAINTAIN ALL LAWN AREAS: RESEED BARE OR THIN AREAS AS NEEDED TO ACHIEVE STABILIZATION.
- 10. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER IN ORDER TO PREVENT GULLYING.

 11. HYDROSEEDING SHALL BE AN ACCEPTABLE ALTERNATIVE WHEN PERFORMED IN ACCORDANCE WITH PENNDOT PUB.

PERMANENT SEEDING SPECIFICATION

SPECIES OR MIXTURE	PERCENT BY WEIGHT	IN LBS. PER		RECOMMENDED SEEDING
		1,000 SQ.FT.	ACRE	DATES
-PERENNIAL RYEGRASS MIXTURE	20%	4.7	195 TO 205	3/15 TO 6/1 8/1 TO 10/15
-CREEPING RED FESCUE or CHEWINGS FESCUE	30%			
-KENTUCKY BLUEGRASS MIXTURE	50%			
			•	

ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

MULCH APPLICATION RATES

MULCUL TYPE	AT LICATION RATE			NOTES	
MULCH TYPE	PER ACRE	PER 1,000 SF	PER 1,000 SY	NOTES	
RAW	3 TONS	140 LB	1,240 LB	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN	
Y	3 TONS	140 LB	1,240 LB	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES	
OOD	1,000 LB CELLULOSE	25 LB	210 LB	WHEN USED OVER STRAW OR HAY	
OOD CHIPS	4-6 TONS	185-275 LB	1,650-2,500 LB	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES	

APPLICATION RATE

MULCH ANCHORING GUIDE

STRAW AND HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION TO PREVENT WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL. THIS METHOD IS LIMITED TO SLOPES NO STEEPER THAN 3:1. THE MACHINERY SHALL BE OPERATED ON THE CONTOUR. (NOTE: CRIMPING OF HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT

ASPHALT, EITHER EMULSIFIED OR CUT-BACK, CONTAINING NO SOLVENTS OR OTHER DILUTING AGENTS TOXIC TO PLANT OR ANIMAL LIFE, UNIFORMLY APPLIED AT THE RATE OF 31 GALLONS PER 1000 SQ. YD. MAY BE USED TO TACK MULCH.

SYNTHETIC BINDERS (CHEMICAL BINDERS) MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MUCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH

> NO. DATE REVISION

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MONROE COUNTY, PENNSYLVANIA

06-28-24 LTSI 2301 APPROVED BY

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