

LEGEND	
[Line]	INDEX CONTOURS
[Line]	INTERMEDIATE CONTOURS
[Line]	PROPOSED INDEX CONTOURS
[Line]	PROPOSED INTERMEDIATE CONTOURS
[Line]	EXISTING DIVERSION DITCHES
[Line]	PROPOSED COMPONENT
[Line]	LIMITS OF DISTURBANCE (4.63 ACRES)
[Line]	PROJECT AREA (10.57 ACRES)
[Line]	12\"/>
[Line]	6\"/>
[Line]	6\"/>
[Line]	6\"/>
[Line]	6\"/>
[Line]	NC TRAIL
[Line]	STRAW NETTING
[Line]	WETLAND
[Line]	ALD LOCATIONS
[Line]	EX. ROADS (GRAVEL)
[Line]	ACCESS ROADS
[Line]	CONSTRUCTED ROCK AREA
[Line]	COMPOST FILTER SOCK
[Line]	UTILITY LINES
[Line]	TREELINE

**BMP MAINTENANCE SCHEDULE**

- Compost Filter Sock**
- Contractor is responsible for inspection of Compost Filter Sock at the frequency described below.
  - Accumulated sediment shall be removed when it reaches half the aboveground height of the sock, placed within the limits of disturbance, and graded to blend into surrounding topography.
  - Compost filter socks shall be inspected weekly and after each runoff event. Damaged compost filter socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.
  - Compost Filter Socks shall be replaced as described within the Compost Filter Sock Detail.
- Erosion Control Blanket**
- By design, Erosion Control Blankets do not collect sediment but rather hold sediment in place, therefore no sediment clearing or disposal is needed.
  - 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.
- Sediment Trap**
- All sediment traps shall be inspected at least weekly and after each runoff event.
  - Access for sediment removal and other required maintenance activities shall be required.
  - A clean out stake shall be placed near the center of each trap. Accumulated sediment shall be removed when it has reached the clean out elevation on the stake and the trap restored to its original dimensions. This sediment shall then be placed within the limits of disturbance, and graded to blend into surrounding topography.
- Alternate Rock Construction Entrance**
- Alternate Rock Construction Entrances will consist of AASHTO#1 top coated with rolled 2RC sized aggregate. Rock should be added when necessary at the end of each work day to ensure specified dimensions are maintained. A stockpile of rock material should be maintained onsite for this purpose.
  - Sediment deposited on roadways should be removed and returned to within the limits of the construction site. Sweeping the deposits into roadway ditches, sewers, culverts, or to other drainage courses is not acceptable.
  - Damaged Rock Construction Entrance should be repaired as necessary to maintain effectiveness.

**CONSTRUCTION SEQUENCE**

- Install alternative rock construction entrances where indicated.
- Install compost filter sock.
- Install temporary rock filter outlet for temporary sediment basin.
- Clear & Grub only the area that is to be disturbed within limits of disturbance. Place trees in windrow / brush piles along outside edge of limits of disturbance or site access as needed. Cessation of earth disturbance activity for four (4) or more days requires temporary stabilization following temporary seeding and mulching specifications.
- Install dewatering basin.
- Install 6\"/>

**EROSION & SEDIMENTATION CONTROL PLAN NOTES**

- Only limited disturbance will be permitted to provide access to install perimeter erosion controls (Compost filter sock, diversion ditches, and rock construction entrance).
- Erosion and sediment control Best Management Practices (BMPs) must be constructed, stabilized, and functional before site disturbance begins within the BMP contributory drainage area.
- After final site stabilization has been achieved (uniform 70% perennial vegetative cover or better where revegetated), temporary erosion and sediment control BMPs must be removed. Areas disturbed during removal of BMPs must be stabilized immediately.
- Stockpile heights must not exceed 35 feet. Stockpile slopes must be 2:1 or flatter.
- Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly.
- Sediment removed from BMPs must be placed within the limits of disturbance in an area protected by BMPs and promptly stabilized to avoid future re-entrainment.
- Any waste materials generated by (including wastes associated with the operation and maintenance of earthmoving equipment and construction materials such as geotextile, rope, revegetation supplies, etc.) or encountered during construction will be recycled, scrapped, or disposed in permitted facilities in accordance with all applicable state and federal regulations as needed.
- Area affected during construction shall be only within the limits of disturbance as shown and shall be kept to the minimum area needed to construct the treatment system.
- Though all cut and fill material will be used and placed onsite, it is the responsibility of the operator to perform due diligence to determine if any fill material imported from offsite is Satisfactory Fill. Satisfactory Fill is defined as: uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, and dredged material.
- An inspection of all BMPs should occur weekly and after every measurable stormwater event unless otherwise noted in the BMP Maintenance Schedule section of this Plan. An inspection log showing dates that E&S BMPs were inspected, any deficiencies found, and corrective actions taken shall be kept on site. PADEP's latest Visual Site Inspection report or equivalent should be used for this purpose.

**NOTES**

- Base map contours derived from a 2006 bare-earth digital elevation model constructed from PAMAP LIDAR elevation points by PA DCNR, Bureau of Topographic and Geologic Survey (PA State Plane - South US Survey Foot) NAD83 (Vertical datum - NAVD83). Roads and surface water features from PASDA breaking features.
- The entirety of the project is located on Pennsylvania Game Commission Property, Gamelands No. 95.
- Sludge Volumes were calculated assuming the wetland and settling pond are full to berm with sludge.
- All dimensions are in feet unless otherwise noted. All slope designations are H:V.
- Wetlands shown include only areas delineated by BioMost, Inc. personnel. Please refer to Wetland Report for additional information and mapping.
- For clarity existing system components are not shown. All existing system components lie within the footprint of the proposed system improvements.
- Effluent samples should be taken where flowing water is noted on downstream side of distribution berm nearest to sample point (001) show on this map.

**TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS**

Temporary - To be applied if construction activities are to be suspended more than four (4) days.  
 Species: Annual Ryegrass  
 Pure Live Seed: 88% Application Rate: 48 LB./AC.  
 Fertilizer Type: None Liming Rate: 0 T./AC.  
 Mulch Type: Hay or Straw Mulching Rate: 3.0 T./AC.  
 Permanent - To be applied within four (4) days of completion of construction activities. 4-6\"/>

**BioMost, Inc.**  
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CLIENT:

STREAM RESTORATION INC. MARS, PA (724)-776-0161 www.streamrestorationinc.org
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NO.	BY	DATE	DESCRIPTION
REVISIONS			

REGISTERED PROFESSIONAL ENGINEER  
CODY A. NEELY  
P.E. 085098  
PENNSYLVANIA

DATE: 10/25/2022	LATITUDE: 41.09803611	SCALE: 1" = 40'
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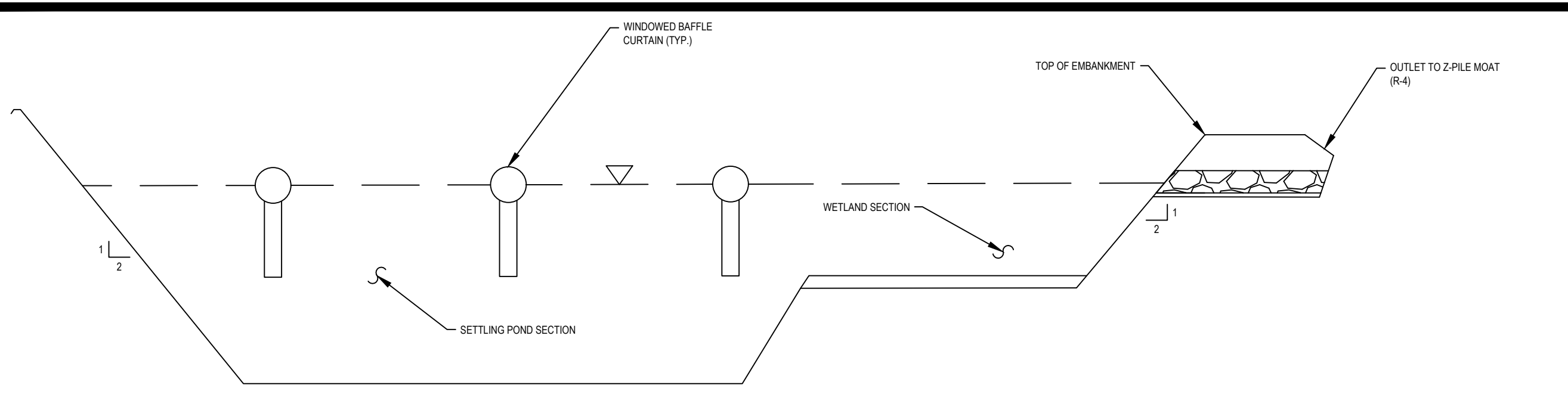
**SR81 REMEDIATION PROJECT**

Washington Township Butte County, PA

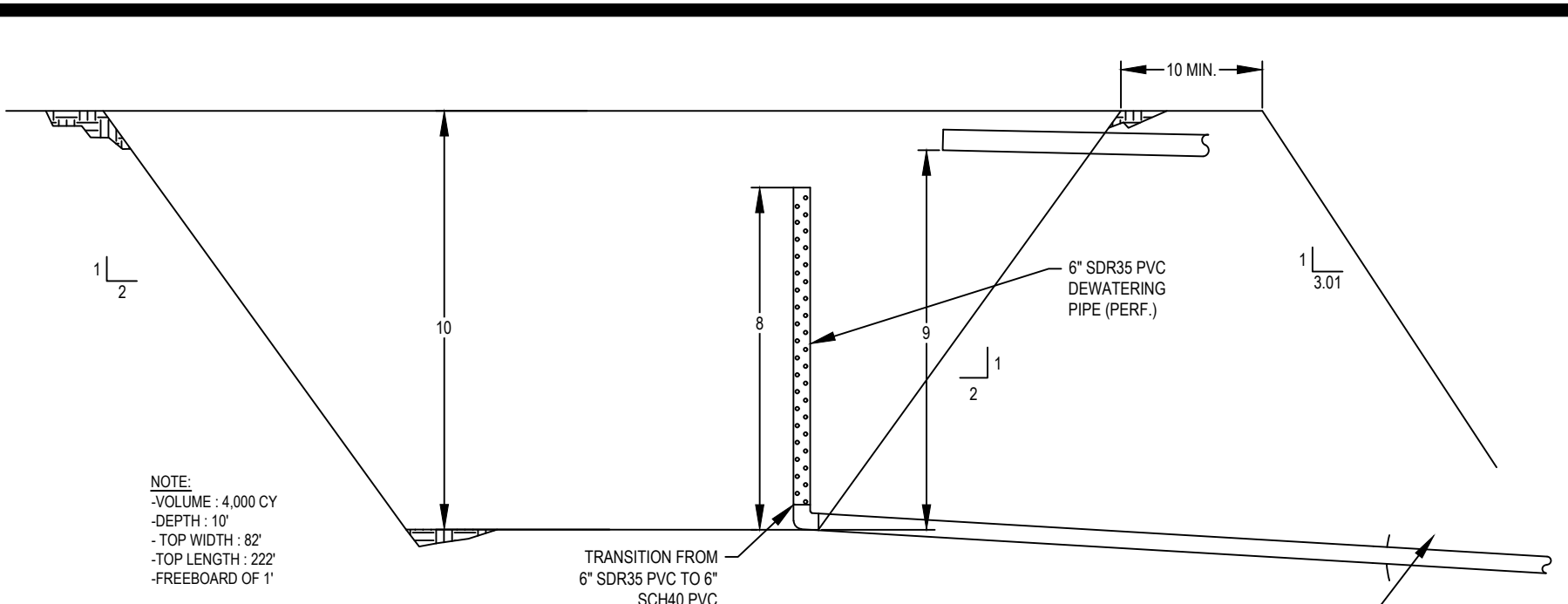
**E&S and DESIGN PLAN**

DRAWING NUMBER: 1 of 2

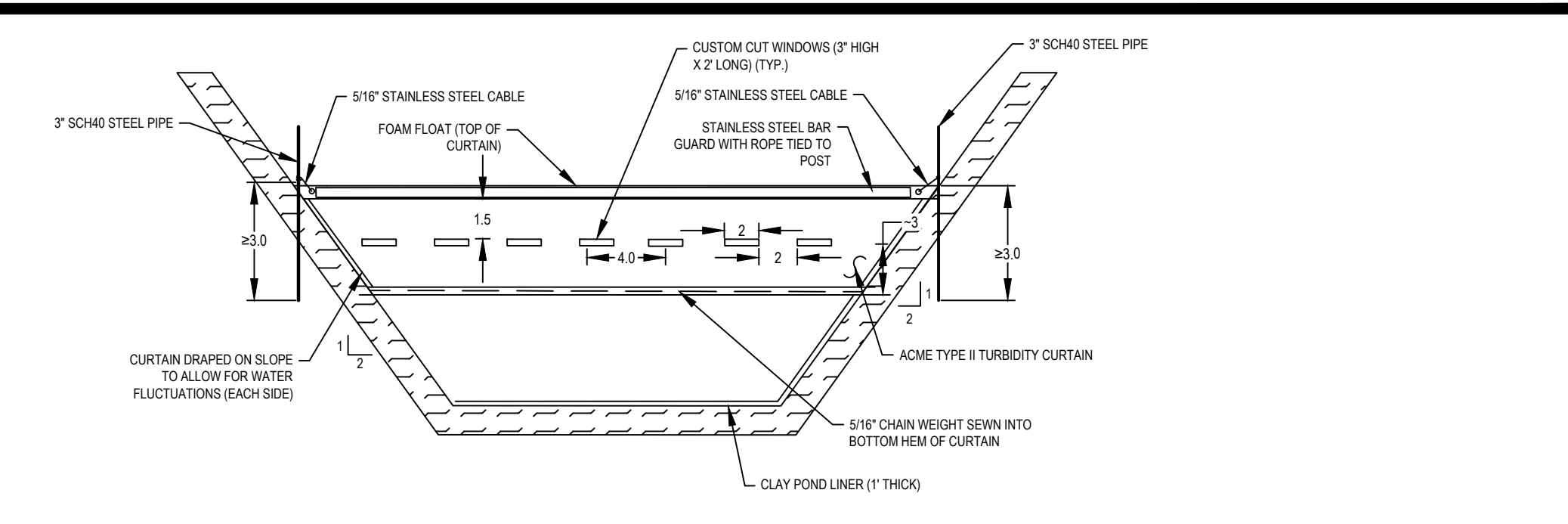




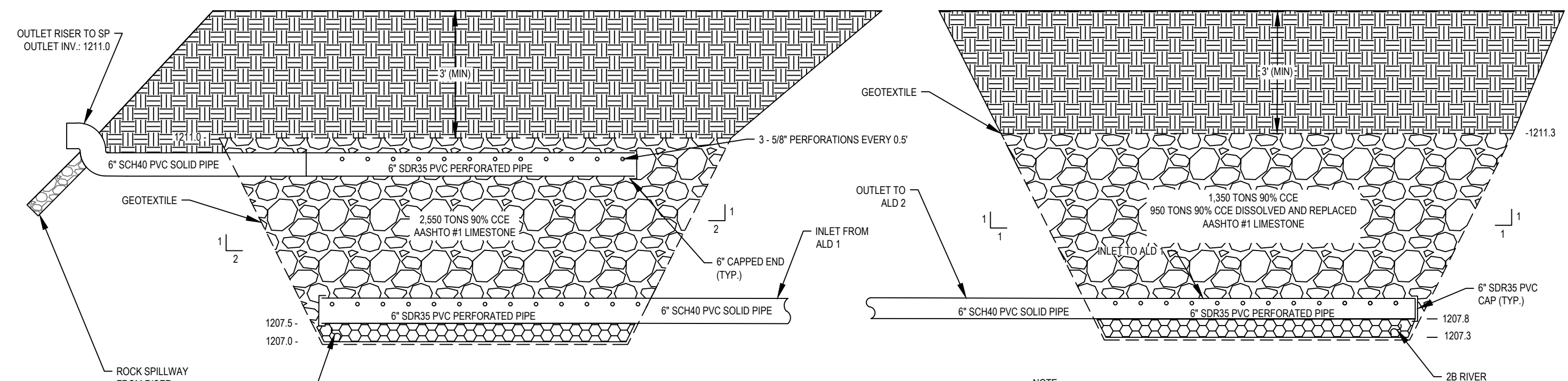
**SETTLING POND & WETLAND**  
Horizontal Scale: None Vertical Scale: None



**DEWATERING BASIN DETAIL**  
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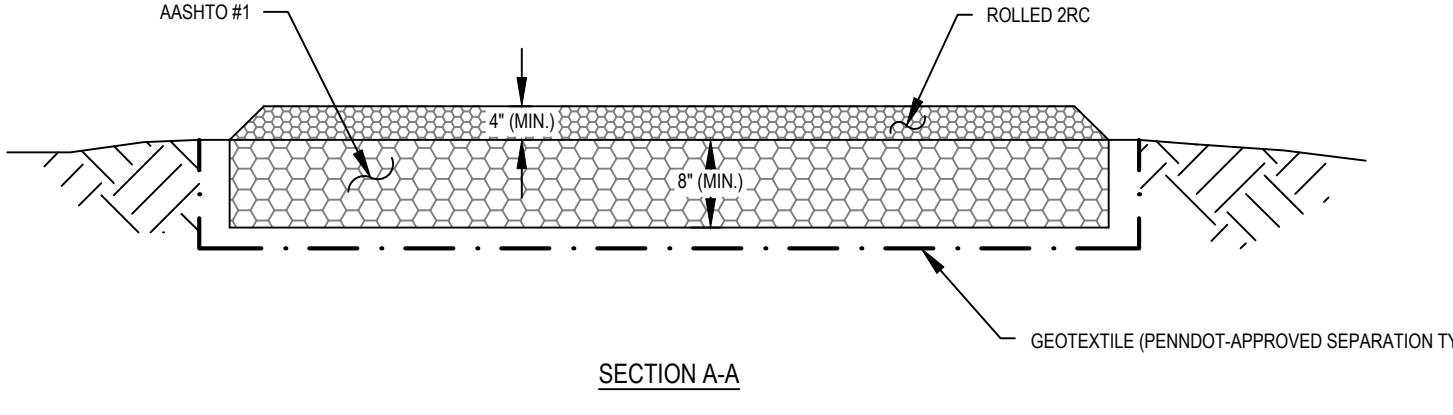


**SETTLING POND WITH WINDOWED BAFFLE CURTAIN**  
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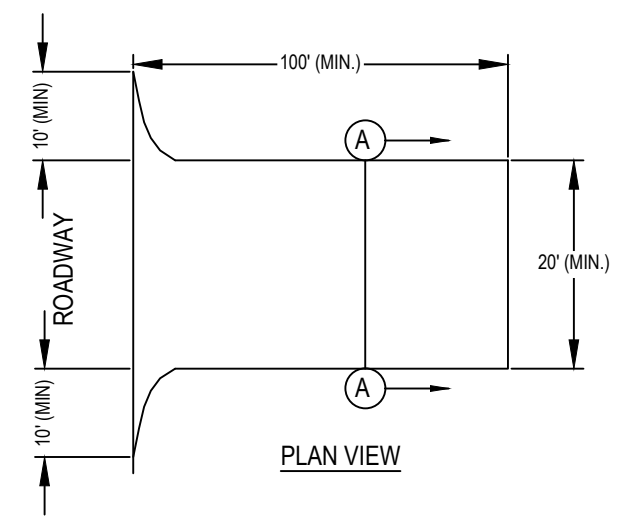


**ALD 2 SECTION VIEW**  
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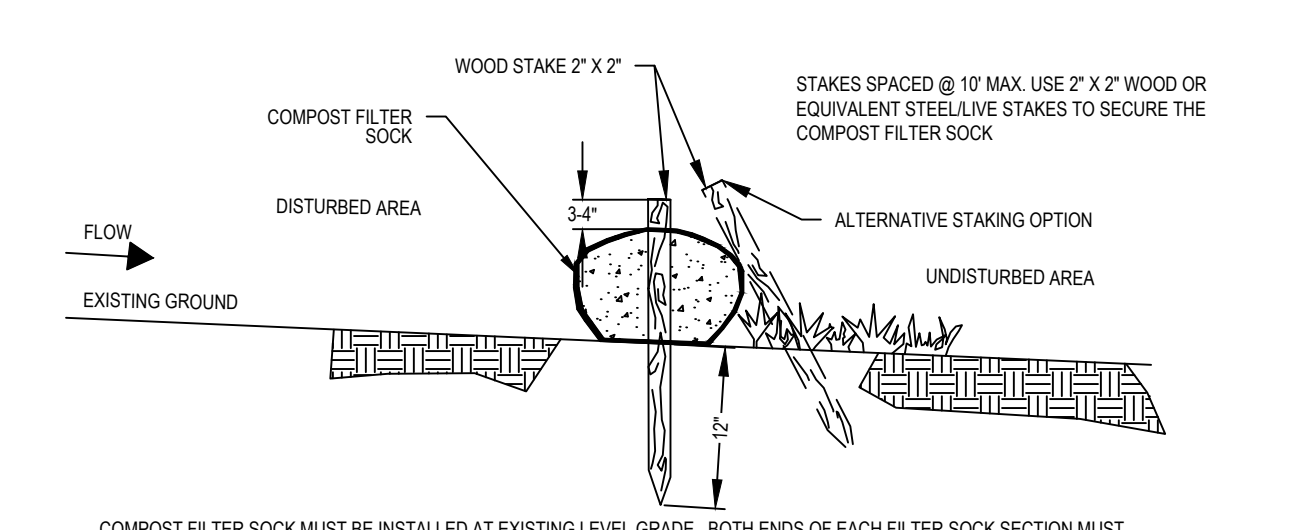
**ALD 1 SECTION VIEW**  
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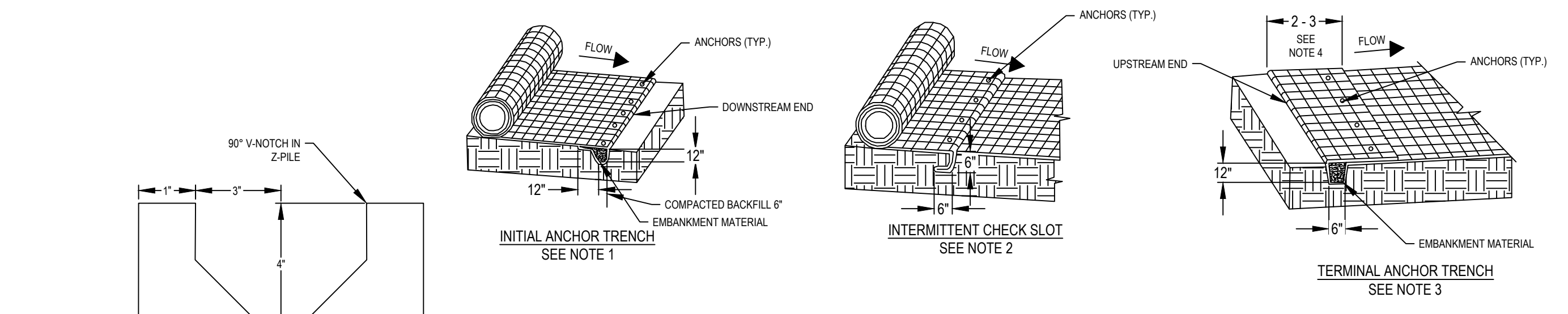
**ALTERNATIVE ROCK CONSTRUCTION ENTRANCE (TYP.)**  
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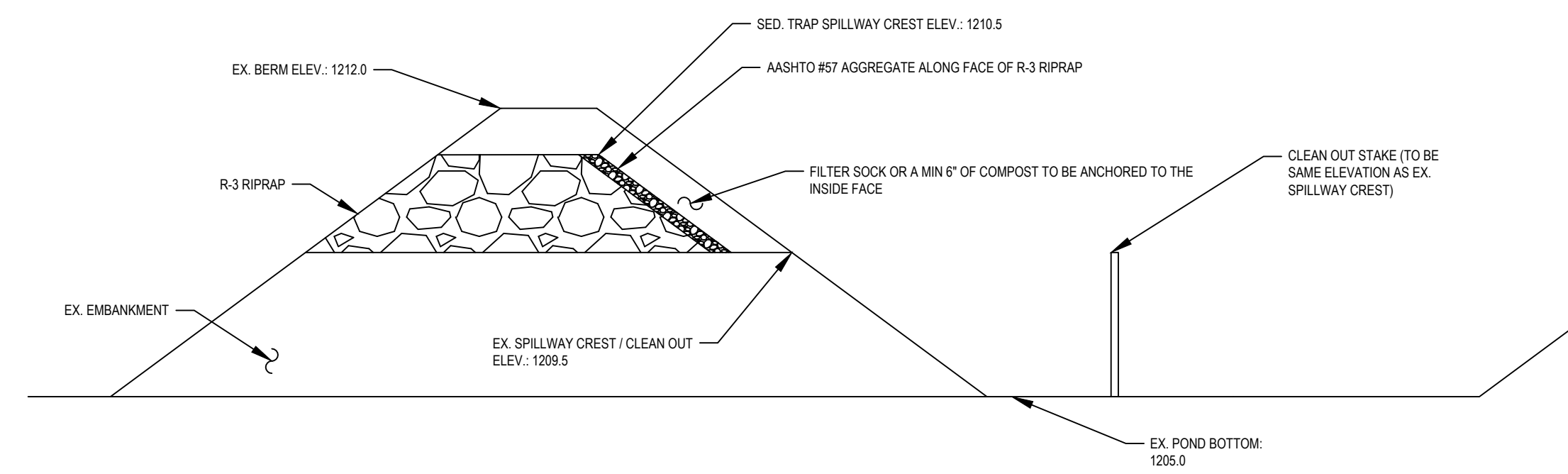
**PLAN VIEW**



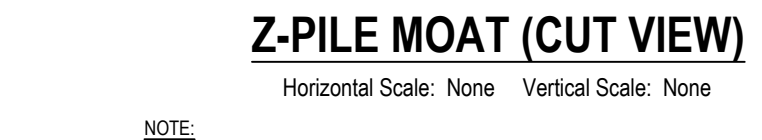
**COMPOST FILTER SOCK DETAIL**  
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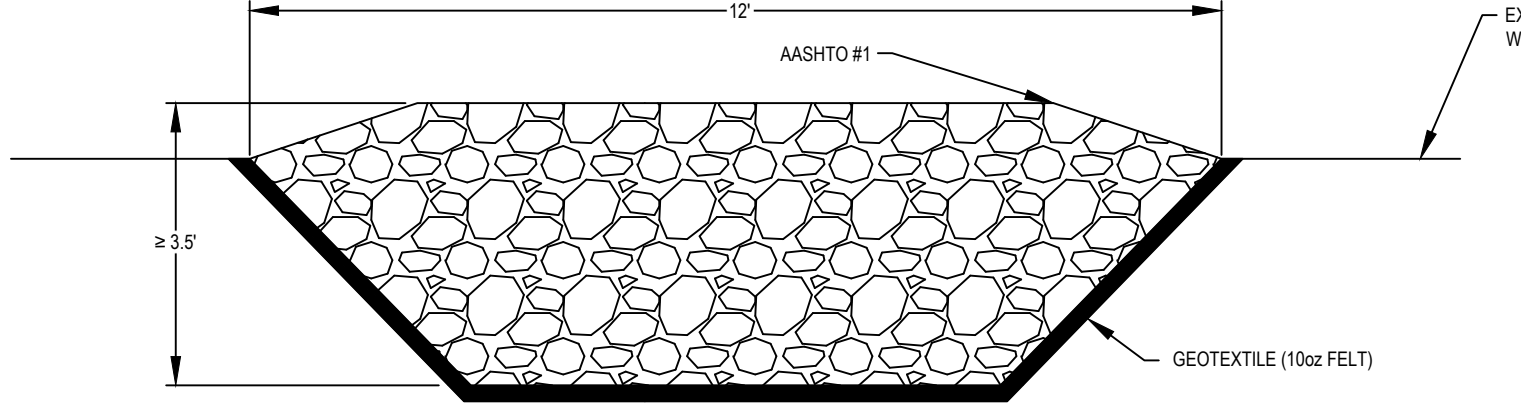
**EROSION CONTROL BLANKET (TYP.)**  
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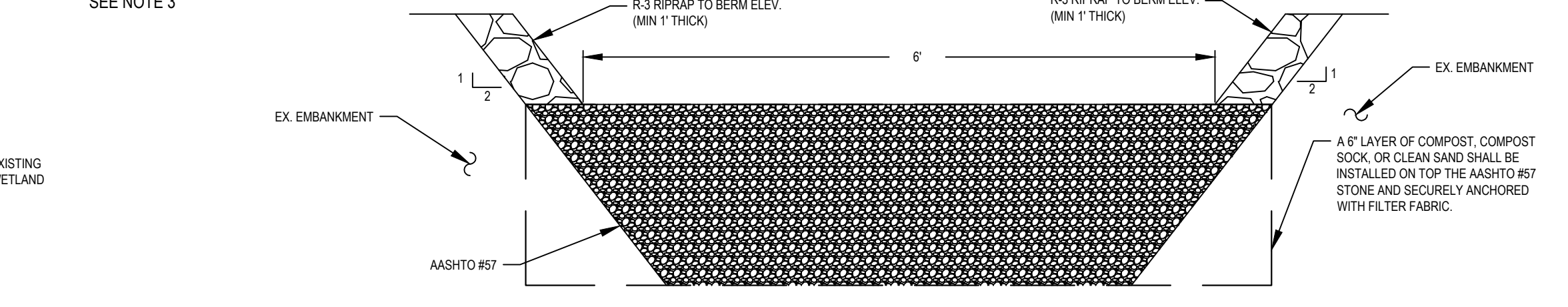
**EMBANKMENT SEDIMENT TRAP (TEMPORARY)**  
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**Z-PILE MOAT (CUT VIEW)**  
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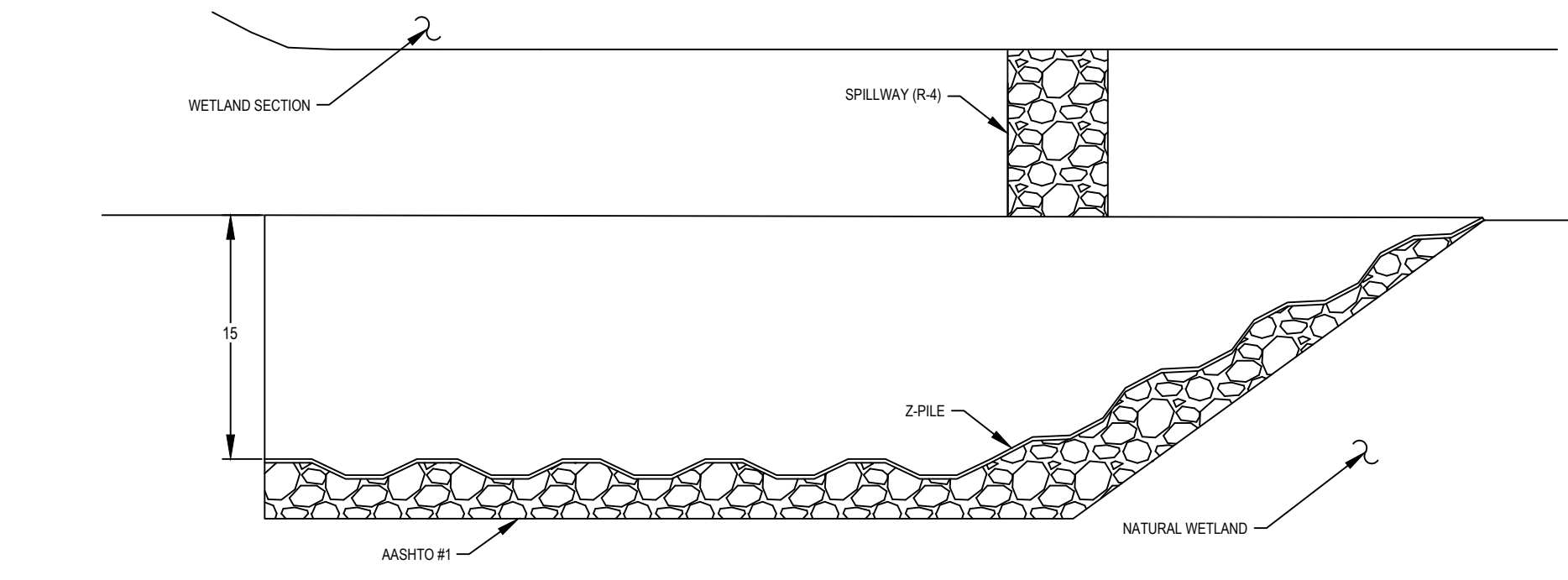
**DISTRIBUTION BERM DETAIL**  
Horizontal Scale: None Vertical Scale: None



**Z-PILE MOAT (FRONT VIEW)**  
Horizontal Scale: None Vertical Scale: None



**Z-PILE MOAT (SIDE VIEW)**  
Horizontal Scale: None Vertical Scale: None



**Z-PILE MOAT (TOP VIEW)**  
Horizontal Scale: None Vertical Scale: None

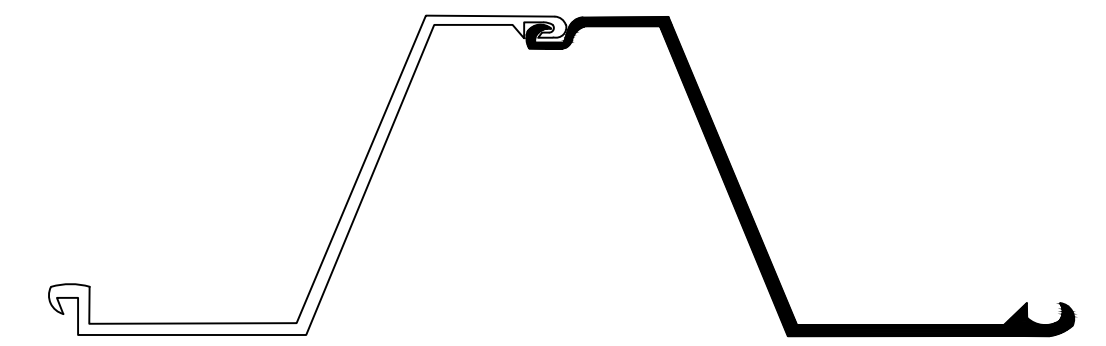
**TABLE 4.1**  
Compost Sock Fabric Minimum Specifications

Material Characteristics	3 mil HDPE	5 mil HDPE	5 mil HDPE Multi-Filament	Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Length	12'	18'	12'	12'	12'
Sock Diameter	18"	24"	24"	24"	24"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability %					
Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

Two-ply systems  
Inner Containment Netting: HDPE biaxial net, Continuously wound, Fusion-welded junctures, 3/4" X 3/4" Max. aperture size, Composite Polypropylene Fabric (Woven layer and non-woven fleecy mechanically fused via needle punch), 3/16" Max. aperture size.  
Outer Filtration Mesh: Sock fabrics composed of burlap may be used on projects lasting 6 months or less.

**TABLE 4.2**  
Compost Standards

Organic Matter Content	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.0
Moisture Content	35% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



**Z-PILES (TYP.)**  
Horizontal Scale: None Vertical Scale: None

**DM**  
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NO.	BY	DATE	DESCRIPTION
REVISIONS			

DATE: 07/27/2022  
DRAWN BY: LVH  
CHECKED BY: ---  
ACAD FILE NAME: 2592 - SR81.dwg  
SIGNATURE / DATE: CODY A. NEELY, P.E.  
PROJECT DESIGNER - BioMst, Inc.

LATITUDE: 41.09803611  
LONGITUDE: -79.86025556  
SCALE: 1" = 40'  
40' 20' 0 40'

**SR81 REMEDIATION PROJECT**  
Washington Township  
Butler County, PA  
E&S and DESIGN DETAILS  
DRAWING NUMBER: 2 of 2