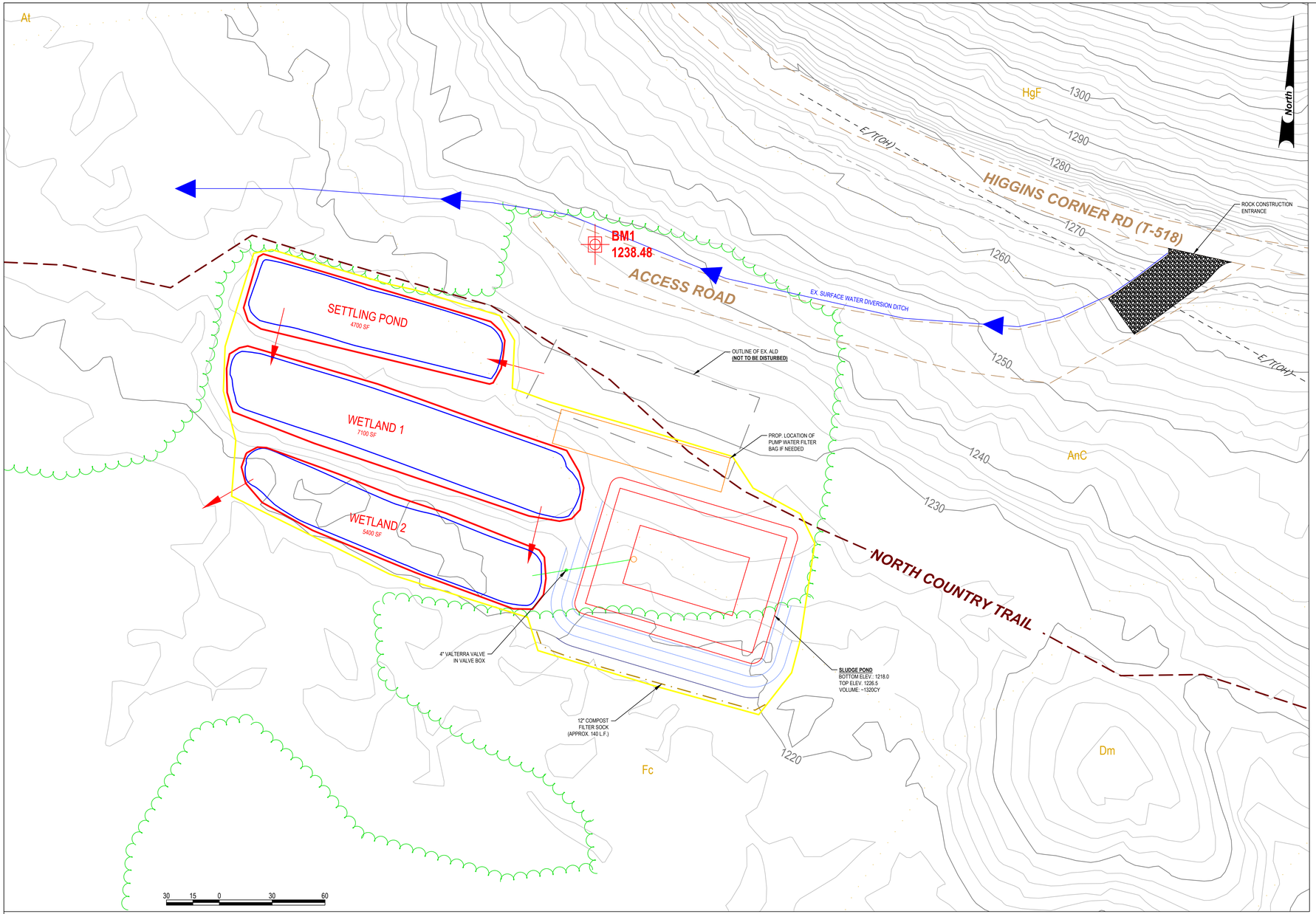


CONSTRUCTION SEQUENCE:

1. Install rock construction enterance and compost filter sock (or approved equivalent) where indicated.
2. Clear & Grubb only the area that is to be disturbed. Place any trees in windrow / brush piles along outside edge of limits of disturbance or site access as needed. Excess woody debris may be burned in accordance with local regulations.
3. Install sludge pond
4. Remove and place sludge and vegetative material from Settling Pond and Wetlands 1 & 2 into Sludge Pond.
5. Clean and improve spillways as necessary.
6. Place excess cut material on pond and wetland berms to reinforce or repair as necessary.
7. Grade all affected areas to blend with surrounding topography to promote positive drainage.
9. Place and spread best on-site soil material, as needed, to ensure successful revegetation.
10. Seed entire affected area as per permanent seeding specifications as soon as possible or within 7 days after construction.
11. Remove all temporary BMPs upon establishing permanent, uniform, 70% perennial vegetative cover .

EROSION & SEDIMENTATION CONTROL PLAN NOTES

1. Only limited disturbance will be permitted to provide access to install rock construction entrance and compost filter sock.
2. Erosion and sediment control Best Management Practices (BMPs) must be constructed, stabilized, and functional before site disturbance begins within the BMP contributory drainage area.
3. 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.
4. Stockpile heights must not exceed 35 feet. Stockpile slopes must be 2:1 or flatter.
5. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Maintenance must include inspection of all erosion and sediment control BMPs after each runoff event and on at least a weekly basis (see details for additional requirements). All preventative and remedial maintenance work, including clean out, repair, replacement, regrading, reseeding, remulching and renetting must be performed within 48 hours or sooner if so specified for a given BMP. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs or modifications of those installed will be required. The site Construction Foreman or his designee must ensure that weekly and post-runoff inspections are completed and shall oversee any required preventative and remedial maintenance work.
6. 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.
7. Any waste materials generated by (including wastes associated with the operation and maintenance of earthmoving equipment and construction materials such as geotextile, pipe, revegetation supplies, etc.) or encountered during construction will be recycled, scrapped, or disposed of in permitted facilities in accordance with all applicable state and federal regulations as needed.
8. Area affected during construction shall be only within the limits of disturbance as shown and shall be kept to the minimum area needed to implement the reclamation project.
9. Though all cut and fill material will be used and/placed on site, it is the responsibility of the operator to perform due diligence and determine if any fill material imported from off site is Clean Fill. Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, used asphalt, and brick, block or concrete from construction and demolition activities that is separate from other waste and is recognizable as such. The term does not include materials placed in or on the waters of the commonwealth unless otherwise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been processed for re-use.).

TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS

Temporary - To be applied within four (4) days if construction activities are to be suspended more than 14 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

(Species - Application Rate): Orchard Grass - 10 LB./AC.; Timothy - 10 LB./AC.; White Dutch Clover - 3 LB./AC.; Alsike Clover - 3 LB./AC.; Ladino Clover 3 LB./AC.; Birdsfoot Trefoil (Empire Variety) - 13 LB./AC.; Winter Wheat - 60 LB./AC. (Winter wheat for fall planting or spring oats at 34 LB./AC. for spring planting. Winter rye or annual rye grass at 25 LB./AC. may also be used.) Kentucky 31 Tall Fescue shall not be used.

Min. Purity: 90% Min. Germination: 80%

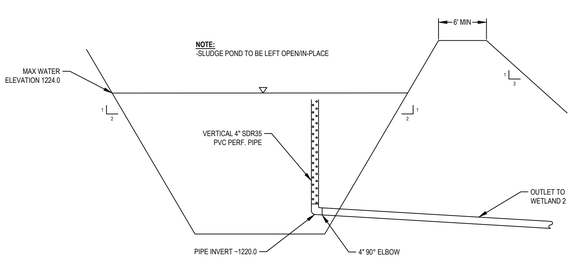
Fertilizer Type: 10-20-20 Fertilizer Appl. Rate: 500 LB./AC.

Liming Rate: 3.0 T./AC. Mulch Type: Hay or Straw Mulching Rate: 3.0 T./AC.

Preferred Seeding Season Dates: 3/15 to 6/1; 8/1 to 10/15

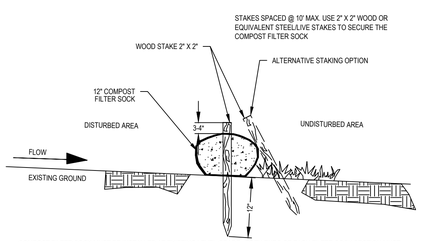
GENERAL NOTES

1. 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 - NAVD88)]. Select topographic and cultural features from 2006 PAMAP aerial photos obtained from www.pasda.psu.edu. Additional information by BioMost, Inc. from limited 2021 site investigations. All existing conditions are to be field verified by the contractor as needed.
3. All dimensions are in feet unless otherwise noted. All slope designations are H:V.
4. The entirety of the project is located within PA State Game Lands 95.
6. Soil unit boundaries and data from websoilsurvey.nrcs.usda.gov accessed May 2021.
7. Earthwork as designed will produced 950 CY of cut and allow for placement of 810 CY of fill. Excess fill material will be used on ex. Settling Pond and Wetland berms and/or blended into surrounding topography as needed..
8. Disturbed area calculations do not include existing treatment areas.
9. Existing passive treatment system pond volumes, elevations, and dimensions are interpolated based on LiDar contours; taken from *"As-Built Plan" SR101A passive treatment system slippery rock creek headwaters* 12/1999 by BioMost, Inc.; and limited site investigations by BioMost, Inc. Spring 2021.
10. Limited tree removal will be necessary to accommodate construction of the sludge pond.
11. All non-treatment wetlands will remain unaffected during construction activities.



SLUDGE POND

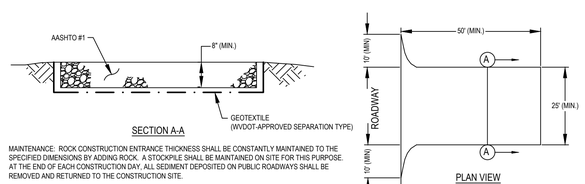
Horizontal Scale: None Vertical Scale: None



COMPOST FILTER SOCK MUST BE INSTALLED AT EXISTING LEVEL GRADE. BOTH ENDS OF EACH FILTER SOCK SECTION MUST EXTEND AT LEAST 8 FEET UPSLOPE AT 45° TO THE MAIN FILTER SOCK ALIGNMENT.
SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FILTER SOCK.
ANY SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE REPAIRED/REPLACED WITHIN 24 HOURS.
FOR WOOD STAKES, 2" X 2" (+/- 3/8") ACTUAL SIZE, NOT NOMINAL.
REPLACE BIODEGRADABLE FILTER SOCK AFTER 6 MONTHS; PHOTODEGRADABLE AFTER 12 MONTHS

12" COMPOST FILTER SOCK DETAIL

Horizontal Scale: None Vertical Scale: None



MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

ROCK CONSTRUCTION ENTRANCE

Horizontal Scale: None Vertical Scale: None

Site coordinates:
41°05'59.3067", -079°50'29.3119"

LEGEND

- EX. PASSIVE TREATMENT COMPONENT
- PROP. SLUDGE POND
- PIPE 4" SDR35 (PERF.)
- PIPE 4" SDR35 (SOLID)
- EX. INDEX CONTOUR
- EX. INTERMEDIATE CONTOUR
- PROP. INDEX CONTOUR
- PROP. INTERMEDIATE CONTOUR
- EX. ACCESS ROAD (DIRT)
- WATER
- PROP. LIMITS OF DISTURBANCE (0.70 ACRES)
- TREELINE

SHEET 1 OF 1	PLAN VIEW

DESIGN and EROSION & SEDIMENTATION CONTROL PLAN

SR 101A PASSIVE TREATMENT SYSTEM REHABILITATION

A Design-Build Project

Venango Township
Butler County, Pennsylvania

Stream Restoration Incorporated

Scale: As Shown July 2021

BioMost, Inc. Mining and Reclamation Services
Mars, PA www.biomost.com

2502101A-Design