

Erosion & Sediment Control Plan and Site Restoration Plan Narrative

Atlantic Sunrise Project

Temporary and Permanent Access Roads
Northmoreland, Eaton, Falls, Overfield, Clinton, and Nicholson Townships
Wyoming County
Pennsylvania

Prepared For:



TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

2800 Post Oak Blvd Houston, TX, 77251

Issued: August 2015 Revised December 2015, January 2016, March 2016, April 2016, October 2016, **August 2017** BL Project No. 14C4909

Prepared By:

BL Companies 4242 Carlisle Pike, Suite 260 Camp Hill, PA 17011



Suzanne King, PE P.E. 082757



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APPENDIX P

AR-WY-036 Specific Narrative and Calculations

- P.1 Site Specific Narrative
 - a. Narrative
 - b. TMDL Discussion
 - c. Minimized Soil Compaction

 - d. Thermal Impact Analysise. Acidic Soil Management Plan
 - f. Road Specific Construction Sequence
 - g. Worksheet 1. General Site Information

P.2 Location Map

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a. E&S Worksheet 1

Site Specific Narrative a. Narrative P.1

- b. TMDL Discussion
- c. Minimized Soil Compaction
- d. Thermal Impact Analysis
- e. Acidic Soil Management Plan
 f. Road Specific Construction Sequence
 g. Worksheet 1. General Site Information



ACCESS ROAD: AR-WY-036

ACT 167 PLAN: None

TMDL: None

NARRATIVE:

AR-WY-036 is a proposed temporary access road (TAR) located in Clinton, Wyoming County, Pennsylvania. The intent of this road is to provide temporary construction access to the proposed 30" Central Penn Line North Pipeline. The road begins at College Avenue and terminates at the pipeline right-of-way at approximate mile post 45.7. This TAR is approximately 490 feet long and follows an existing gravel drive for the entire length of the road. The existing surface of the gravel drive is in good condition.

Temporary equipment mats are proposed over the existing waterway at approximate station 1+80 and through the floodway/floodplain. A driveway apron is proposed where the TAR meets College Avenue, and a rock construction entrance with compost filter sock is proposed here the TAR meets the pipeline. Upon completion of the pipeline construction the existing road will be restored to the pre-construction width and the disturbed areas will be restored to pre-construction conditions.

TMDL DISCUSSION:

The nearest surface waters to receive runoff from this road are not subject to TMDL restrictions.

MINIMIZED SOIL COMPACTION:

The Project seeks to minimize soils compaction impacts associated with access roads to the maximum extent practicable. AR-WY-036 is an existing road that will be utilized as a temporary access road. construction traffic will utilize the existing road path. Soil compaction impacts have been minimized by the use of the existing road path.

THERMAL IMPACT ANALYSIS:

Thermal impacts associated with AR-WY-036 will be avoided to the maximum extent practicable. The following measures have been implemented to minimize thermal impacts:

 AR-WY-036 is approximately 490 linear feet, minimizing the total length of necessary temporary construction and, therefore, minimizing thermal impact of the road.



- The entire access road follows an existing gravel road. The use of an existing road corridor eliminates the need for additional tree removal. The ability to use this road without the removal of additional trees acts to minimize the thermal impact of this road.
- Compost filter socks will be placed downgradient of the proposed access road and will promote infiltration of runoff from the proposed temporary impervious surfaces. Infiltration of runoff prior to entering of receiving waters allows for runoff to assimilate to ground water temperatures which are minimally influenced by seasonal temperature changes, minimizing the thermal impact of this road.

ACIDIC SOIL MANAGEMENT PLAN:

	AR-LU-036 Soil Acidity Table			
Soil				
Мар	Soil Name	PH		
Symbol				
WfC	Wellsboro flaggy loam, 8 to 15 percent slopes	5.3		
NxB	Norwich and Chippewa channery silt loames, 0 to 8 percent slopes, rubbly	5.7		
WcC	Wellsboro channerly loam, 8 to 15 percent slopes	5.3		
OfB	Oquaga flaggy loam, 3 to 8 percent slopes	4.8		

An Acid Producing Soils Control Plan is included as part of this application. The plan identifies the measures to be used to control pollution associated with construction of access roads that contain acid-producing soils. The plan requires that these measures be applied only for soils with a pH less than 4.0, as recommended by the Natural Resources Conservation Service (NRCS). The table above depicts the soil types present on this road as well as the acidity of the soils. The pH of the soils on this road are outside the threshold established by the Acid Producing Soils Control Plan. Therefore, the measures prescribed in the plan do not need to be implemented for this road.

105 PERMIT COORDINATION:

The calculation of fill volumes provided within the Chapter 105 Application is based on the extent of the access road LOD within the floodplain/floodway to account for worst-case field scenarios requiring the addition of a one foot-depth of gravel for maintenance and/or minor access road widening for improved access. As such, the fill volume is an overestimation and does not reflect the actual volume of fill required by the current access road design, as presented within the Chapter 102 Permit. The inclusion of the overestimated fill volumes within the Chapter 105 Application limits future revisions to the Chapter 105 Application due to minor field adjustments; conversely, revisions to access road design after the 102 Permit issuance will be coordinated with PADEP/CCD.



ROAD SPECIFIC CONSTRUCTION SEQUENCE: ACCESS ROAD: AR-WY-036

- 1. At least 7 days prior to starting earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite contractors, Environmental Inspectors, 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 representative from the local conservation district to an on-site preconstruction meeting.
- 2. At least 3 days prior to starting 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.
- 3. Hold pre-construction conference with the Environmental Inspectors, local County Conservation District (CCD), PADEP and Design Engineer.
- Survey crews locate and stake special areas of concern (e.g., wetlands, streams, culverts, other utilities, etc.), edge of proposed access road, and field locate the limit of disturbance.
- 5. Install orange construction fence around areas to be preserved.
- 6. Locate staging areas and access points including the rock construction entrance. Install compost filter sock down slope of this area.
- 7. Strip and stockpile topsoil; install compost filter sock around stockpiles. Soil stockpile areas to support the access roads shall be located within the area of minimum disturbance/reduced grading for the same access road that the topsoil was stripped, or within the pipeline ROW. Stockpiled soil shall not exceed 35 feet in height, have maximum side slopes of 2:1, and be surrounded by 12" compost filter sock. Existing excavated material that is not to be reused in the work area is to be immediately removed from the site and properly disposed of at an approved facility or permitted waste area.
- 8. Install the rock construction entrance and timber matting.
- 9. Install timber matting over the existing culvert crossing as shown on plans.
- 10. Remove brush to effectively install compost filter sock.
- 11. Install compost filter sock as depicted on the E&SC Plan.



- 12. Apply stabilization measures immediately to disturbed areas due to the initial clearing and installation of compost filter sock.
- 13. The Compliance Manager shall provide PADEP at least three days' notice prior to bulk earth disturbance and upon completed installation of compost filter sock.
- 14. If applicable, install security fence. The necessity of a security fence will be at the discretion of the Contractor.
- 15. Stabilize the Site with geotextile and gravel surfacing where indicated in the E&SC Plans.
- 16. Add AASHTO #57 stone to the existing road in areas where existing gravel is thinning or bare to create a uniform travel surface. Continue adding AASHTO #57 stone to rutted or thinning areas as necessary during active use of the access road.
- 17. Upon temporary cessation of an earth disturbance activity or stage of an activity where the cessation of earth disturbance activities will exceed four days, disturbed areas shall be immediately seeded, mulched, or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities. For an earth disturbance activity or stage of an activity to be considered temporarily stabilized, the disturbed areas shall be covered by a minimum uniform coverage of mulch and seed, with a density capable of resisting accelerated erosion and sedimentation which temporarily minimizes accelerated erosion and sedimentation. Temporary stabilization will not occur on active vehicular travel ways within the right of way. The on-site environmental inspector will log daily activity within the limits of disturbance and notify the Contractor of areas requiring temporary stabilization (i.e., areas where work has ceased for at least four days).
- 18. Once the temporary access road is no longer necessary, remove the rock construction entrance and timber matting from the temporarily improved sections and dispose of the materials at a suitable disposal or recycling site in compliance with local, state, and federal regulations.
- 19. Loosen and de-compact topsoil throughout the temporarily improved sections of the access road. Replace stockpiled topsoil and grade the access road to match preconstruction conditions. Immediately fertilize, seed and stabilize areas at finished grade. Maintain compost filter sock until Site work is complete and uniform 70% perennial vegetative cover is established.
- 20. Upon completion of earth disturbance activities and permanent stabilization of disturbed areas, the Owner shall contact the local CCD for an inspection prior to the removal of the compost filter sock. Vegetated areas must achieve a minimum

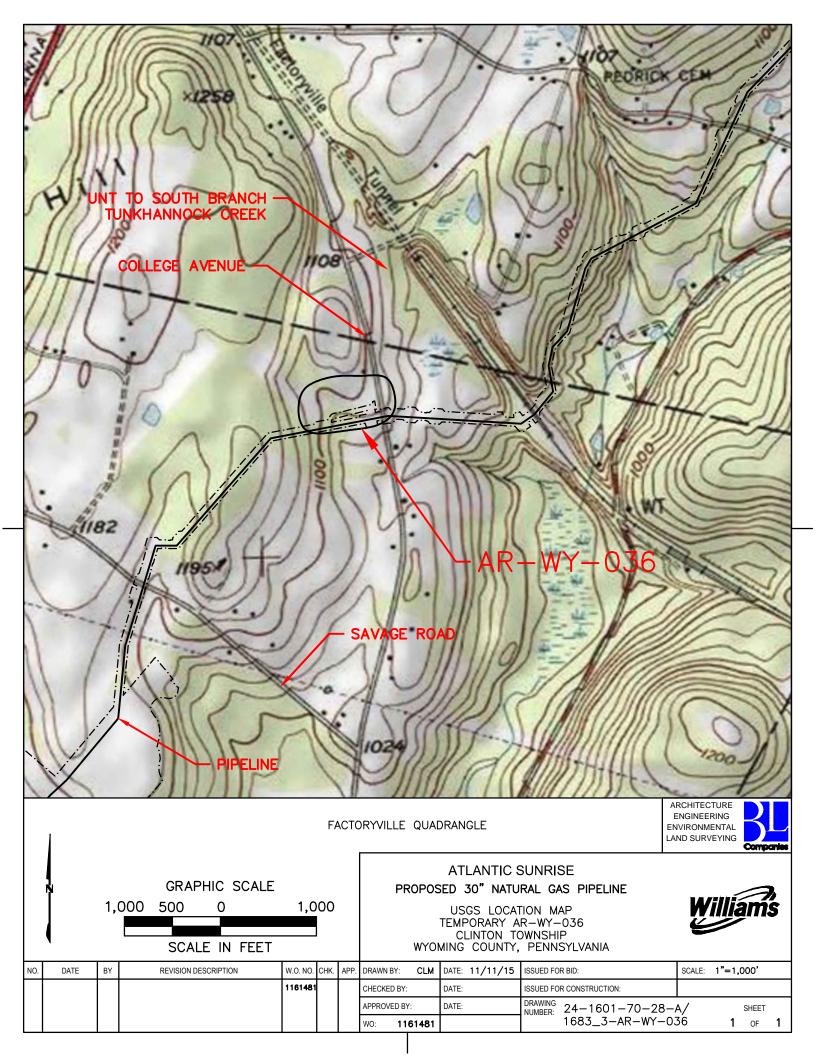


uniform 70% perennial cover over the entire disturbed area to be considered stabilized. Roadways and parking areas should have at least a clean subbase in place to be considered stabilized. In agricultural use areas, an area shall be considered to have achieved final stabilization if the above conditions are met or if an area exhibits any ground cover conditions normally associated with active agricultural practices, including but not limited to bare earth on cultivated land, temporary vegetative cover on cultivated land, or pasture not meeting a minimum uniform 70% perennial vegetative cover.

- 21. Upon local CCD and Transco approval of stabilization and re-vegetation, either:
 - a. Leave the compost filter sock in place, cut open the mesh, and spread the mulch as a soil supplement; or
 - b. Remove the compost filter sock, stabilize areas disturbed by removal, and properly dispose/recycle the compost filter sock.
- 22. Remove orange construction fencing and security fence.
- 23. Upon completion of earth disturbance activities, removal of compost filter sock and permanent stabilization of disturbed areas, the Owner shall contact the local CCD for a final inspection.

	Worksheet 1. General Site Information		
RUCTIONS: Fill out W	orksheet 1 for each watershed		
Date:	23-Mar-15		
Project Name:	Atlantic Sunrise Pipeline AR-WY-036		
Municipality:	Clinton Township		
County:	Wyoming		
Total Area (acres):	0.56		
Major River Basin:	Susquehanna River		
	pa.us/dep/depupdate/watermgt/wc/default.htm#newtopics		_
Watershed:	Tunkhannock Creek		
Tratoronou.	Tunikhamiook Oreek		
Sub-Basin:	Upper Susquehanna River		
Nearest Surface Wa	ater(s) to Receive Runoff: UNT to South Branch Tunkhannock	k Creek	
Nearest Surface Wa	ater(s) to Receive Runoff: UNT to South Branch Tunkhannock	k Creek	
Nearest Surface Wa Chapter 93 - Design http://www.pacode.co	ater(s) to Receive Runoff: UNT to South Branch Tunkhannock nated Water Use: CWF,MF	k Creek	
Nearest Surface Wa Chapter 93 - Design http://www.pacode.co	nated Water Use: CWF,MF		X
Nearest Surface Wa Chapter 93 - Design http://www.pacode.co	ter(s) to Receive Runoff: UNT to South Branch Tunkhannock atted Water Use: CWF,MF cm/secure/data/025/chapter93/chap93toc.html to Chapter 303(d) List? .pa.us/dep/deputate/watermgt/wqp/wqstandards/303d-Report.htm	Yes	X
Nearest Surface Wa Chapter 93 - Design http://www.pacode.co Impaired according http://www.dep.state. List Causes of Im Is project subject to Municipal Separate http://www.dep.state. anagement/GeneralF	nated Water Use: CWF,MF	Yes No Yes No Yes	x x
Nearest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface	nated Water Use: CWF,MF	Yes No Yes	x
Nearest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface	atter(s) to Receive Runoff: Description of the complete runo	Yes No Yes No Yes	x x
Nearest Surface Watchapter 93 - Design http://www.pacode.co Impaired according http://www.dep.state. List Causes of Impaired subject to Municipal Separate http://www.dep.state.anagement/GeneralFexisting or planned If yes, distance from Approved Act 167 F	atter(s) to Receive Runoff: Description of the complete runo	Yes No Yes No Yes	x x
Nearest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface Watchest Surface	nated Water Use:	Yes No Yes No Yes	x x





P.3 Sediment Barrier Table

a. E&S Worksheet 1

E&S WORKSHEET #1 Compost Filter Sock

PROJECT NAME: Atlantic Sunrise					
LOCATION: AR-WY-036	3				
PREPARED BY: OLC	REVISED BY: EAW, RMR	DATE: 4/30/15	REV 9/16/16, 11/10/16		
CHECKED BY: BJP	CHECKED BY: SMK	DATE: 4/30/15	REV 9/16/16, 11/10/16		

2" X 2" WOODEN STAKES PLACED 10' O.C.

COMPOST FILTER SOCK

UNDISTURBED AREA

12" MIN

SOCK	Dia.		SLOPE	SLOPE LENGTH ABOVE BARRIER	SOCK
NO.	In.	LOCATION	PERCENT	(FT)	LENGTH
1-5	32	STA 1+25 to STA 3+75	10	930	225
2	12	STA 1+05 to STA 5+00	6	106	71
Stockpile					
SP-1	12	STA 3+75 to STA 4+75	N/A	N/A	225

SOURCE: Pennsylvania Erosion and Sediment Pollution Control Manual, Page 372