WETLAND BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.2

Wetland Studies and Solutions, Inc.® a DAVEY company

Wetland ID: W-B25-PEM-1	**Crossing Start Date:** 11/29/2023	**Crossing Completion Date:** 12/14/2023
Milepost: 245.6	**Pre-Con Assessment Date:** 11/29/2023	**Post-Con Assessment Date:** 12/14/2023
Station: 12986+67	**Cowardin Classification:** PEM **(PEM, PFO, PSS, POW)**	**Wetland Impact Area (sq ft.):** 609.84
County: Roanoke		

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?		X	
2.	Was the existing vegetation removed prior to initiating land disturbance within the resource?		X	
3.	Was the top 1-foot (12-inches) of wetland soil segregated and stockpiled separate from trench spoils?		X	
4.	Was excess material not needed for backfill removed and disposed of in an upland area?		X	
5.	Was the top 12-inches of backfill made with clean native wetland topsoil?		X	
6.	Were standard decompaction practices (disking, plowing, cultivating, tilling, or incorporation of organic matter into the topsoil horizon) implemented prior to applying seed?		X	
7.	Was wetland topsoil replaced and temporarily seeded?		X	
8.	Was permanent seed applied to unsaturated wetlands?		X	
9.	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area.		X	
10.	Were impervious trench breakers/plugs properly installed within 25-feet of the resource to prevent subsurface erosion to or from the resource area?		X	
11.	Was the pre-construction survey data provided and utilized during restoration in attempt to maintain the original surface hydrology, and were contours re-established to pre-construction conditions to maintain overland flow patterns?		X	
12.	Have civil surveys been scheduled to verify as-built conditions meet pre-construction conditions in accordance with the project Mitigation Framework and federal/state permit requirements?		X	
13.	Was the time of disturbance minimized by conducting resource work continuously to completion?		X	
14.	Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage?		X	
15.	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30) in PFO classified wetlands?	X		
16.	Did any unauthorized discharges to unpermitted resources occur during the crossing? If so, explain the corrective actions implemented in the Comments section and include additional photos.			X

Item #	Biological Conditions	Pre-Con	Post-Con
17.	**Wetland Saturation:** *Are surface waters, the water table, and/or overall soil saturation present? (Select Yes or No)*	No	No
18.	**Resource Alterations: Are the wetland soil conditions visibly disturbed?** **Examples:** *Livestock presence, haul roads, farm traffic, drain tiles, recent mowing/clear cutting, recent excavating/disking of soils, etc.* **Rating:** *1-Negligible (undisturbed/natural resource), 2-Minor (20-40% of resource disturbed by alterations), 3-Moderate (40-80% of resource disturbed), 4-Poor (>80% of resource disturbed)*	1 - Negligible	1 - Negligible
19.	**Is vegetation present within the permitted impact area prior to disturbance? (Pre-Con)** **Are areas properly seeded and stabilized after restoration? (Post-Con)** **Rating:** *1-Optimal (60-100% heavy vegetative cover), 2-Suboptimal (30-60% mixed vegetative coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetative coverage, etc.)*	2 - Suboptimal	1 - Optimal

Comments/Remarks

MVP EI is Chris Seymour, and the Precision Pipeline foreman is Sam Grey.

11/27/23: To have enough space to segregate and stockpile the topsoil for the S-B21, W-B24-PEM/PSS crossings, the large stockpile of subsoil from the excavation of the W-B25-PSS-2 entry and exit bore pits had to be relocated. Excess subsoil was used to backfill to the entry bore pit (which was dug in the upland patch between W-B25-PEM-1 and W-B25-PSS-2). Before this backfilling could take place, a 12-foot pup had to be added to the end of the pipe (going toward W-B25-PEM-1) within the bore pit. There was not enough space to add this pup within the current dimensions of the pit, so a tail ditch was dug about 10 feet into W-B25-PEM-1. The topsoil was removed, placed on timber mats, and covered with geotech fabric. The subsoil was stockpiled and segregated. However, due to a miscommunication during all the crew changes, there was no pre-construction meeting held for W-B25-PEM-1 before it was impacted, so this action was reported to the agencies as an Non-Compliance Report. The Pre-construction meeting for this crossing will be held on 11/29/23 at 10 AM. The open cut of this resource will not begin until next Tuesday, 12/5 after the projected rainfall has passed. -A. Thorpe

11/29/23: The pre-construction meeting was held, and an assessment was made. Because the resource was disturbed before the pre-construction meeting was held, preparation for the crossing will start before the 24-hour buffer period. This includes removing the mats and stabilizing the exposed wetland with straw mulch. -A. Thorpe

11/30/23: The crew completed erosion and sediment (E&S) tasks to prepare for the upcoming rain. The subsoil pile next to the bore pit was condensed and the filter sock boundary between the wetland and the bore pit was replaced. -A. Thorpe

12/1/23: The crew completed half a day's work in the upland due to inclement weather. -N. Filip

12/2/23: The top 12-inches of wetland topsoil was removed and segregated from trench spoils onto timber mats (with geotech underneath) and covered with curlex. Timber mats were used underneath the equipment during topsoil excavation. Survey staked the center line for the open cut and trench excavation began from the existing bell hole on the CIS. -A. Thorpe

12/4/23: Trench excavation continued. -A. Thorpe

12/5/23: The trench was padded, and the pipe was lowered into the trench. The fitting was incorrect, so the pipe was removed, and a cut was made. The pipe was lowered into the trench again. The fitting was incorrect, so the crew removed the pipe and will troubleshoot the fitting tomorrow. -A. Thorpe

12/6/23: A cut was made, and the pipe was lowered into the trench. The 12-foot pup on the GAS was cut to 7-feet and welding began on the CIS. Another pup will have to be welded onto the GAS to get the precise fitting. -A. Thorpe

12/7/23: QA/QC for the weld on the CIS began. Cuts were made to the lowered pipe on the GAS to accompany the final pup needed to complete the join. The final pup was cut to length, lowered in, and both ends were welded. -A. Thorpe

12/8/23: Final QA/QC of the CIS weld and GAS welds were completed. -A. Thorpe

12/9/23: The CIS impervious trench breaker was constructed with bentonite bags and construction of the GAS impervious trench breaker began. River weights were installed and partial backfill also began. -A. Thorpe

12/11/23: Construction of the GAS trench breaker continued. -A. Thorpe

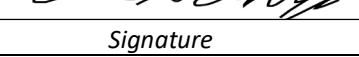
12/12/23: The GAS trench breaker was installed, and backfilling began. -A. Thorpe

12/13/23: Trench boxes were removed, and backfilling of the subsoil was completed. Survey staked the boundaries and the top 12-inches of backfill was made with clean, native wetland topsoil. The topsoil was then decompacted. -A. Thorpe

12/14/23: The topsoil was seeded with a wetland seed mix and straw mulch was applied. Fresh filter socks were placed along its boundaries and the post-construction assessment was completed. -A. Thorpe

No impacts to biological conditions were observed during the crossing activity.

In accordance with the Mountain Valley Pipeline Consent Decree, dated October 11, 2019, this independent report was completed to document the on-site monitoring of instream invertebrate and fisheries resources during all construction activity related to waterbody and wetland crossings, and document instream conditions and any impacts to the resources.

This report was written by	Alessandra Thorpe *Print Name*	 *Signature*	12/14/2023 *Date*

Required Photos

Photo Description: View of permitted resource impact area during pre-construction assessment.

Photo Description: At edge of LOD, view of unpermitted resource area conditions during pre-construction assessment.

Photo Description: View of permitted resource impact area during post-construction assessment.

Photo Description: At edge of LOD, view of unpermitted resource area conditions during post-construction assessment.

Optional Additional Photos

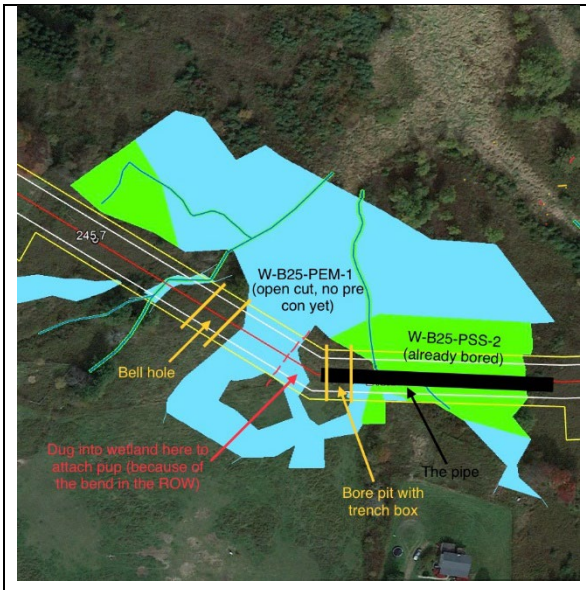
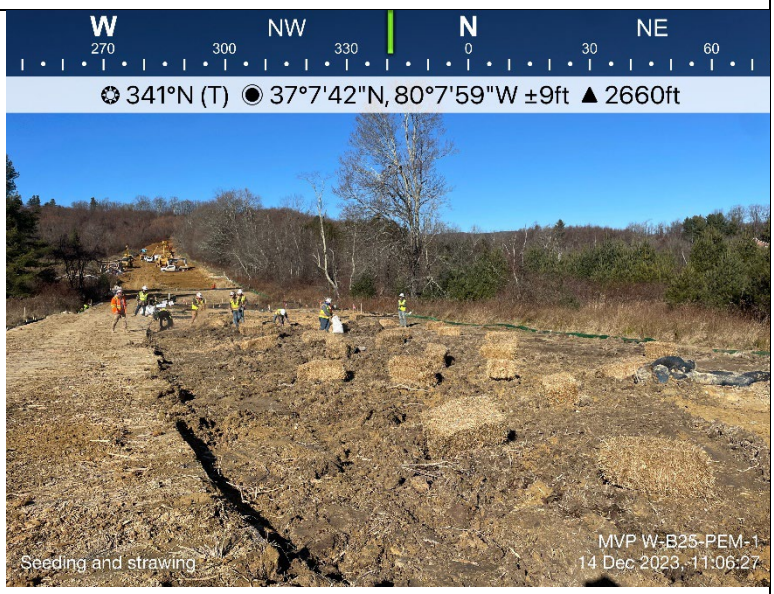


Photo Description: A diagram of the NCR that occurred on 11/27/23.	**Photo Description:** River weights that were installed on the pipe.
	
Photo Description: The wetland topsoil in the process of being covered in curlex.	**Photo Description:** The crew applying seed and straw mulch.