STREAM BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.3

Stream ID: S-CC1	**Crossing Start Date:** 11/16/2023	**Crossing Completion Date:** 11/20/2023
Milepost: 295.2	**Pre-Con Assessment Date:** 11/11/2023	**Post-Con Assessment Date:** 11/22/2023
Station: 15596+32	**Stream Classification:** Perennial **(Perennial, Intermittent, Ephemeral)**	**Bankfull Width (ft.):** 15
County: Pittsylvania	**303(d) Impairment Listing:** Impaired	**Riffle:Pool Complexes Present?** Yes

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were all applicable resource specific crossing conditions satisfied? Time of Year Restrictions (TOYR)? N/A Fish Relocation? Yes Mussel Relocation? N/A		X	
2.	Is this resource designated a wild or stockable trout stream?			X
3.	Which crossing methods were utilized during the stream crossing? *(Select one or more)* Dam & Pump, Flume, Cofferdam, Conventional Bore, Horizontal Directional Drill (HDD) Bore?	Dam & Pump		
4.	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?		X	
5.	Was excess material not needed for backfill removed and disposed of in an upland area?		X	
6.	Was the top 12-inches of backfill made with clean native stream substrate?		X	
7.	Was the pre-construction survey data provided and utilized during restoration in attempt to re-establish pre-construction contours?		X	
8.	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?			X
9.	Were impervious trench breakers/plugs properly installed within 25-feet of top-of-bank to prevent subsurface erosion to or from the resource area?		X	
10.	Was permanent seed and stabilization material (straw or matting) applied to riparian areas and stream banks prior to re-establishing flow to the impact area of the channel?		X	
11.	Was the time of disturbance minimized by conducting resource work continuously to completion?		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.	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30)?	X		
14.	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
15.	**Predominant Substrate Type (select one):** *Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay*	Cobble (2-10")	Cobble (2-10")
16.	**Channel Conditions:** **Rating:** *1-Optimal (80-100% stable banks), 2-Suboptimal (60-80% stable banks), 3-Marginal (40-60% stable banks), 4-Poor (20-40% stable banks), 5-Severe (0-20% stable banks, highly eroded or unvegetated banks)*	2 - Suboptimal	2 - Suboptimal
17.	**Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:** **Rating:** *1-Optimal (60-100% heavy vegetative cover), 2-Suboptimal (30-60% mixed vegetated coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetated coverage, etc.)*	1 - Optimal	2 - Suboptimal
18.	**Instream Habitat Conditions:** **Examples:** *Varied substrate sizes, varied combination of water velocities/depths, presence of woody/leafy debris, stable substrate with low amount of mobile particles, low embeddedness, shade protection, undercut banks, root mats, submerged aquatic vegetation.* **Rating:** *1-Optimal (Habitat conditions present in >50% of resource), 2-Suboptimal (Habitat conditions in 30-50% of resource), 3-Marginal (Habitat conditions in 10-30% of resource), 4-Poor (Habitat conditions in 0-10% of resource)*	1 - Optimal	1 - Optimal
19.	**Channel Alterations:** **Examples:** *Straightened channel, non-MVP stream crossings, non-native riprap/rock along banks, concrete/gabions/concrete block, manmade embankments, constrictions w/in channel, livestock or agricultural impacts.* **Rating:** *1-Negligible (unaltered/natural stream), 2-Minor (20-40% of resource disrupted by channel alterations), 3-Moderate (40-80% of resource disrupted), 4-Severe (>80% of resource disrupted)*	1 - Negligible	1 - Negligible

Comments/Remarks

11-11-2023: The pre-construction meeting occurred. The Precision Pipeline foreman is B. Manning, and the MVP EI is R. Mathews. The buffer zones were established. The resource crossing method will be an open cut. The blasting crew from Hoover was onsite for a test drill. The work is anticipated to commence on or around Wednesday, 11-22. -K. Douglas

11-16-2023: The environmental crew was onsite for the fish relocation. The initial 12-inches of topsoil from the 10-foot buffer and the 50-foot buffer was removed on both sides of the stream. The soil was placed segregated, placed on Geotech, and covered in straw mulch. The top 12-inches of stream substrate was excavated and segregated. The dam and pump around were installed. Trench excavation began. -G. Aceves

11-17-2023: Trench excavation continued. Pipe was lined up and lowered into the trench. The crew began welding on the CIS. -G. Aceves

11-18-2023: The CIS weld was QA/QCed, blasted and coated. The CIS trench breaker was installed within 25-feet from the top of bank to prevent erosion to or from the resource area. The crew began backfilling the wetland and stream. -G. Aceves

11-19-2023: Continued backfilling. The stream substrate and stream bank were restored with topsoil. The survey crews were onsite to assist in the restoration of pre-construction contours. The environmental crew seeded the stream bank with riparian seed and installed erosion control blankets. -G. Aceves

11-20-2023: The GAS trench breakers were installed within 25-feet of the stream and within the wetland. The wetland topsoil was restored and survey was onsite assisting with the final grade for reconstruction. The trench was backfilled within both 50-foot buffer zones. Compost filter sock was installed. The site was seeded with temporary and permanent seed mixes then mulched. Compost filter sock was installed at the 10- and 50-foot buffer zones and wetland boundary. -G. Aceves

11-22-2023: The post-construction assessment was conducted. -G. Aceves

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

In accordance with the Mountain Valley Pipeline Consent Decree, Case No. CL18006874-00, (Issued 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	George Aceves		11/22/2023
	Print Name	*Signature*	*Date*

Required Photos

Photo Description: Downstream view of permitted impact area during pre-construction assessment.

Photo Description: Conditions of the downstream area outside the ROW during pre-construction assessment.

Photo Description: Downstream view of permitted impact area during post-construction assessment.

Photo Description: Conditions of the downstream area outside the ROW during post-construction assessment.

Optional Additional Photos

Photo Description: The dam and pump installed and functioning.

Photo Description: Fish relocation.

Photo Description: An overview of the dewatering structure.

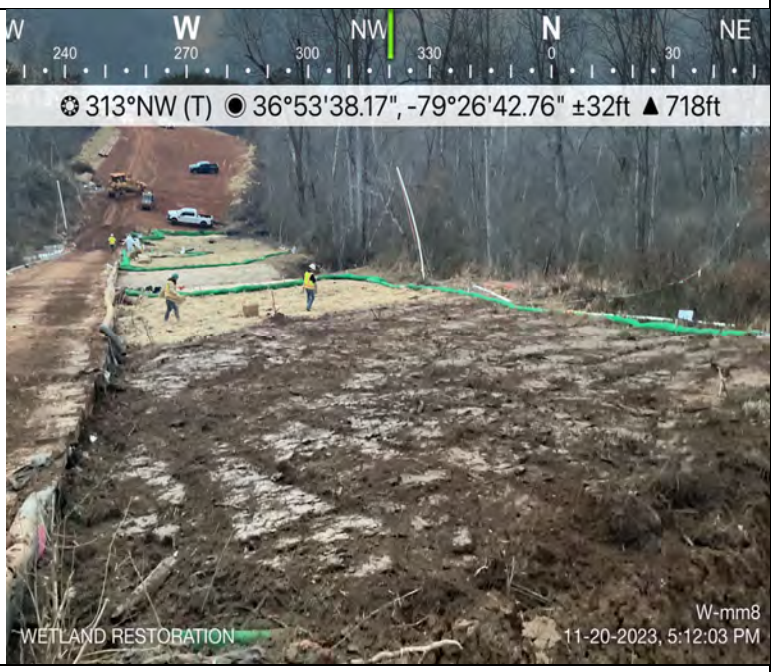

Photo Description: Seed and straw mulch applied during site restoration.