

STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



Stream ID: S-G5	Crossing Start Date: 11/06/2023	Crossing Completion Date: 11/08/2023
Milepost: 291.7	Pre-Con Assessment Date: 11/04/2023	Post-Con Assessment Date: 11/08/2023
Station: 15414+85	Stream Classification: Ephemeral (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 6
County: Pittsylvania	303(d) Impairment Listing: Not Impaired	Riffle:Pool Complexes Present? No

Item #	Resource Crossing Conditions	N/A	YES	NO
1.	Were all applicable resource specific crossing conditions satisfied? Time of Year Restrictions (TOYR)? <u>N/A</u> Fish Relocation? <u>N/A</u> Mussel Relocation? <u>N/A</u>		X	
2.	Is this resource designated a wild or stockable trout stream?			X
3.	Which crossing methods were utilized during the stream crossing? (<i>Select one or more</i>) Dam & Pump, Flume, Cofferdam, Conventional Bore, Horizontal Directional Drill (HDD) Bore?		Flume	
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): <i>Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay</i>	Mud/Silt/Clay	Mud/Silt/Clay
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.)	2 - Suboptimal	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)	3 - Marginal	3 - Marginal
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

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Comments/Remarks

11-4-2023: Pre-Con meeting and auditor assessment. The crossing method is an open cut. Soil separation and segregation was discussed. Flume will be utilized. Dam and pump will be put as an auxiliary if needed. Discussion of returning storing soil, between grey socks. Will check if blasting is necessary today. Constructed the dewatering system on top of hill near stream. -G. Aceves

11-6-2023: Loose pipe ends were stripped. The initial 12" of topsoil from the 10' buffer and 50' buffer was removed on both sides of the streams. Soil was placed on geotech and straw was placed over it. Flume crossing was installed, and dewatering functioning properly. 12" of stream substrate removed and segregated from other topsoil for tie-in pipe started and finished. Tie-in pipe lined up and welding on CIS started. -G. Aceves

11-7-2023: QA/QC CIS weld, blasted and coated. Lined up GAS pipe loose end and started welding. Padding for CIS of stream started. CIS trench breakers were installed within 25' of top of bank to prevent erosion to or from the resource area. Backfilling on CIS started. QA/QC GAS weld. Partially completed GAS trench breakers. -G. Aceves

11-8-2023: Blasting, coating, and jeoped GAS weld. Finished GAS trench breakers. Continued backfilling. Stream substrate and stream bank topsoiled restored. Survey crews on site assisting restoration of pre-construction contours. Environmental crew seeded stream bank with riparian seed and blanket with erosion control blanket. Survey crew also assisted in restoring site specific grades on CIS. Post-con auditor assessment 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.

<i>This report was written by</i>	George Aceves <i>Print Name</i>	 <i>Signature</i>	11/08/2023 <i>Date</i>
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Required Photos



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

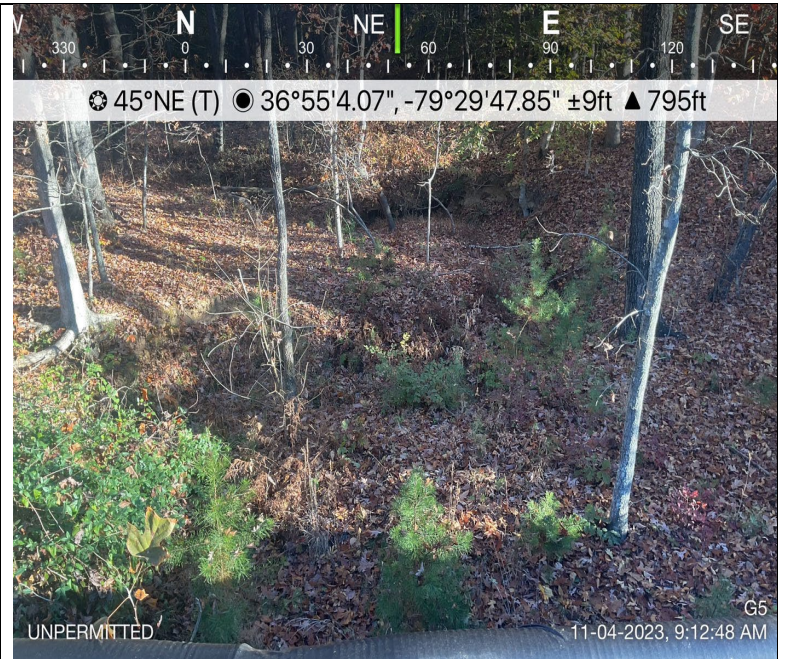


Photo Description: Conditions of the downstream area outside the ROW during pre-construction assessment.



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

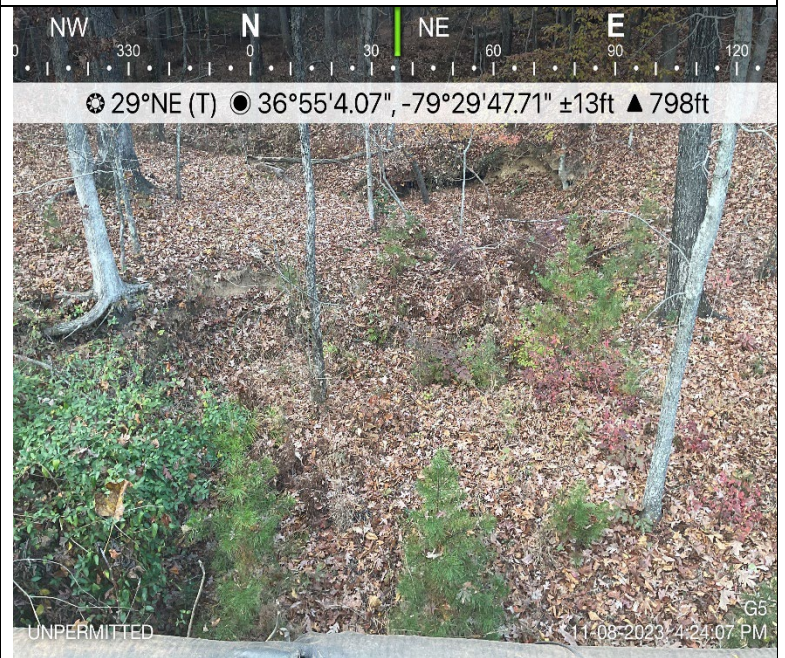


Photo Description: Conditions of the downstream area outside the ROW during post-construction assessment.

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Optional Additional Photos



Photo Description: Dewatering structure for bags and sediment control.



Photo Description: Flume installed throughout crossing.



Photo Description: Secondary containment for light plants and pumps.



Photo Description: Riparian seed used for stream bank