

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-F16a-F16b	<b>Crossing Start Date:</b> 11/11/2023	<b>Crossing Completion Date:</b> 11/16/2023
<b>Milepost:</b> 229.2	<b>Pre-Con Assessment Date:</b> 11/09/2023	<b>Post-Con Assessment Date:</b> 11/16/2023
<b>Station:</b> 12112+13	<b>Stream Classification:</b> Ephemeral (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 3
<b>County:</b> Montgomery	<b>303(d) Impairment Listing:</b> Not Impaired	<b>Riffle:Pool Complexes Present?</b> 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?			Dam and Pump, 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.	<b>Predominant Substrate Type (select one):</b> <i>Bedrock, Boulder (&gt;10"), Cobble (2-10"), Gravel (0.1-2"), Sand (&lt;0.1"), Mud/Silt/Clay</i>	Mud/Silt/Clay	Mud/Silt/Clay
16.	<b>Channel Conditions:</b> <b>Rating:</b> 1-Optimal (80-100% stable banks), 2-Sub-optimal (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)	1 - Optimal	1 - Optimal
17.	<b>Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:</b> <b>Rating:</b> 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (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.	<b>Instream Habitat Conditions:</b> <b>Examples:</b> 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. <b>Rating:</b> 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)	4 - Poor	4 - Poor
19.	<b>Channel Alterations:</b> <b>Examples:</b> 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. <b>Rating:</b> 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**

11/09/2023- Pre-construction meeting and auditor assessment. Chris Seymour will be the on-site EI.

11/10/2023- Dam and pump installed for the crossing to start in stream activity. Buffer zone topsoil and top one foot of stream bed material was removed and properly segregated and stockpiled. - T. Cullop

11/11/2023- Stream was trenched out. A flume was used for overnight streamflow maintenance. - T. Cullop

11/13/2023- Flume was used as an overnight control for the stream. This is no flow to the stream. Small amount of ground water was pumped to the dewatering structure, and everything functioned properly. Pipe was lowered into the ditch and welded for the tie-in.- T. Cullop


11/14/2023: Installed trenchbreakers, padded and backfilled using clean subsoil. -T. Brodbeck

11/15/2023: Topsoil and stream substrate restored. Survey team took final shots on streambed and stream banks in 10-ft buffer for final restoration. -T. Brodbeck

11/16/2023: Post-construction auditor assessment completed. -T. Brodbeck

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

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>	<b>Troy Brodbeck</b> <i>Print Name</i>	 <i>Signature</i>	<b>11/16/2023</b> <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.

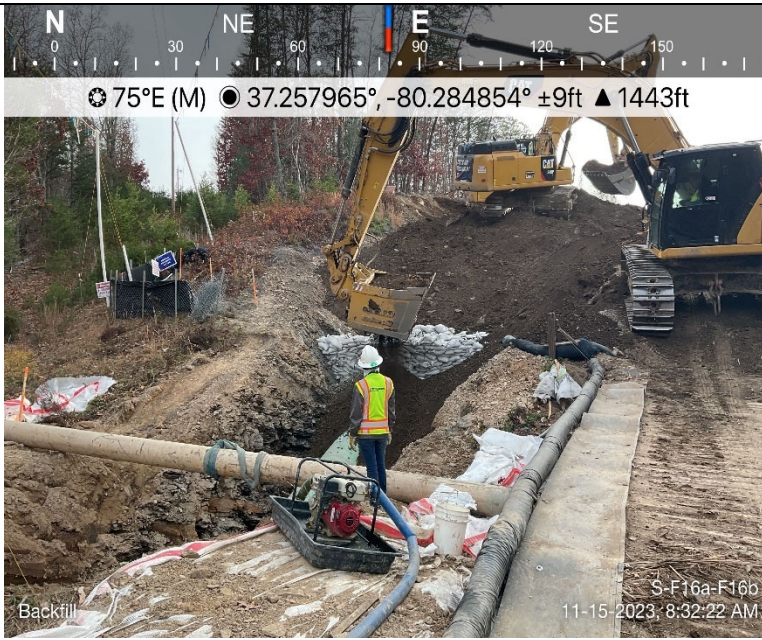


**Photo Description:** Standing on left bank viewing the centerline across the impact area. Area under the bridge and downstream areas remain unimpacted by construction activity.

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## Optional Additional Photos



**Photo Description:** Padding the pipe with subsoil prior to full subsoil backfill and final restoration. Trenchbreaker installed and flume remained installed throughout crossing.



**Photo Description:** Streambed and buffer zone topsoil removed and stockpiled separately prior to subsoil excavation.



**Photo Description:** Top 12" of streambed substrate segregated and stockpiled separately.



**Photo Description:** Upstream dam installed and operating prior to in-stream work activity.