

# STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Version 2.3



<b>Stream ID:</b> S-MM11	<b>Crossing Start Date:</b> 10/24/2023	<b>Crossing Completion Date:</b> 11/01/2023
<b>Milepost:</b> 229	<b>Pre-Con Assessment Date:</b> 10/23/2023	<b>Post-Con Assessment Date:</b> 11/02/2023
<b>Station:</b> 12101+57	<b>Stream Classification:</b> Ephemeral (Perennial, Intermittent, Ephemeral)	<b>Bankfull Width (ft.):</b> 8
<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?		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>	Cobble (2-10")	Cobble (2-10")
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)	2 - Suboptimal	2 - Suboptimal
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.)	1 - Optimal	1 - Optimal
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)	2 - Suboptimal	2 - Suboptimal
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**

El on-site is Chris Seymour and Foreman is Brandon Manning.

10/23/2023- Pre-construction meeting and auditor assessment completed. Anticipated start date is 10/24/2023.  
-S. Manzo

10/24/2023- Removed topsoil from buffer areas and began excavation in upland areas. Hit rock and will need to blast tomorrow. -S. Manzo

10/25/2023- Blasted rock within subsoil and resumed excavation. -S. Manzo

10/26/2023- Finished trenching through stream area and lowered pipe outside 50ft buffer. -S. Manzo

10/27/2023- Lowered in pipe in stream section. -S. Manzo

10/28/2023- Lowered pipe on going-away-side outside 50ft buffer. Welded, X-rays, and coated the welds.  
-S. Manzo

10/30/2023- Welded, sand blasted, coated, and did x-rays on going-away-side. QC completed and backfill to begin on 10/31. -S. Manzo

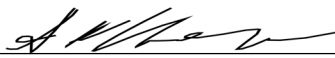
10/31/2023- Installed trench breakers with partial backfill of subsoil. -S. Manzo

11/1/2023- Subsoil backfill completed. Stream substrate and buffer zone topsoil restored. Restoration is complete. Post-construction auditor assessment will be completed tomorrow. -S. Manzo

11/2/2023- Post-construction auditor assessment completed. -S. Manzo

No unauthorized discharges or impacts to biological conditions 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>	<u>Sergio Manzo Saavedra</u> <i>Print Name</i>	<u></u> <i>Signature</i>	<u>11/02/2023</u> <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



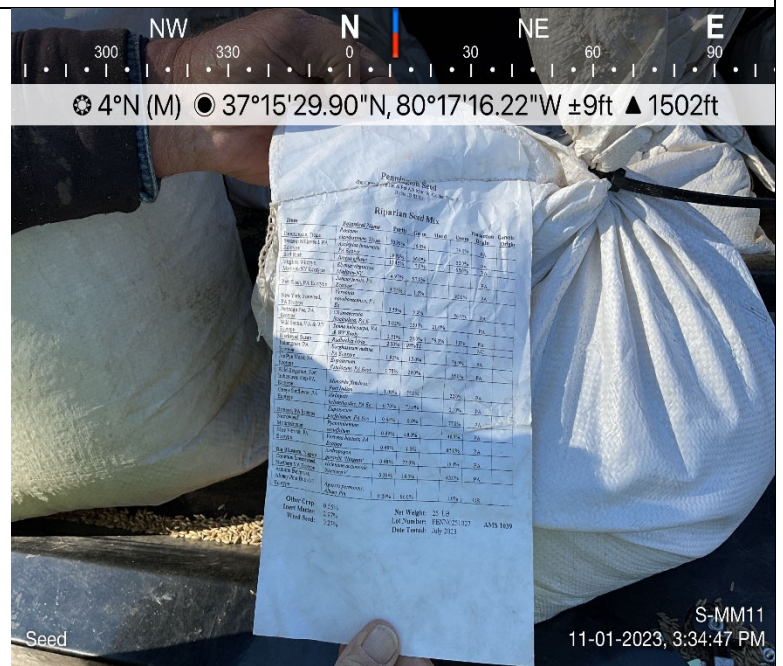
**Photo Description:** Stream substrate stripped, segregated, and stockpiled separately from subsoil.



**Photo Description:** Overview of crossing area. Flume installed to convey any streamflow across the impact area throughout the crossing.



**Photo Description:** Survey team on-site assisting with restoration of pre-existing conditions.



**Photo Description:** Seed-mix utilized within resource area during restoration.