STREAM BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.3

Wetland Studies and Solutions, Inc.® a DAVEY company

Stream ID: S-EF48	**Crossing Start Date:** 09/26/2023	**Crossing Completion Date:** 09/30/2023
Milepost: 266.2	**Pre-Con Assessment Date:** 09/14/2023	**Post-Con Assessment Date:** 10/03/2023
Station: 14066+75	**Stream Classification:** Intermittent **(Perennial, Intermittent, Ephemeral)**	**Bankfull Width (ft.):** 2
County: Franklin	**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)? N/A Fish Relocation? N/A 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*	Gravel (0.1-2")	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	1 - Optimal
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.)*	3 - Marginal	1 - Optimal
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)*	2 - Minor	2 - Minor

Comments/Remarks

09-14-2023: Site Pre-Con meeting and auditor assessment. MVP EI is Bill LeClaire, Precision Foreman is Lance Romberg. Construction to begin approximately 09-18-2023. This resource is crossed in conjunction with W-EF51.

9-20-2023: Took photos and reviewed OC plan with Bill "Liam" Leclaire. Start with pump and dam but replace with flume that will stay until the crossing is completely done. Probably won't start crossing until 9-22 or later. Have not entered 50ft buffer. Vegetation cut so crews could clearly see pre-construction conditions of the wetland/stream. -S. Canfield

9-21-2023: No change. Minor repairs to E&S controls and bridge crossing. No debris entered the resource. 9/25/23 is the anticipated start date - S. Canfield

9-22-2023: Crossing has not started. New filter sock installed, and sidewalls repaired where needed. -S. Canfield

9-24-2023: No changes or activity within resource. -S. Canfield

9-25-2023: Stripped the topsoil from the 50ft buffers and added signs to indicate where the piles are located. not entered the 10ft buffers yet. Plan to start crossing 9-26-23. -S. Canfield

9-26-2023: Crossing started today. 10ft buffer topsoil and 50ft topsoil were removed, stockpiled separately, and mulched. Wetland topsoil and stream substrate material were segregated and individually wrapped in their own geotech material. Wetland subsoil was segregated and stored on top of geotech material. All segregated materials are marked with signs to ensure proper placement when restoring the resources. Trench was dug and pipe was being staged to install soon. -S. Canfield

Before entering the 10ft buffer the crew installed a dam and pump at approximately 9:00am. At approximately 4:30pm the auditor inspected the dam on the upstream side and saw that no water had accumulated. There is no flow in the stream. Dam and pump will still be kept in place and monitored as required throughout the crossing. There is water within the trench that is seeping from underground, not coming from the stream. -S. Canfield

9-27-2023: Multiple trench boxes and metal plates installed in trench to ensure trench safety. Pipe placed into trench and welding began. -S. Canfield

9-28-2023: Welding pipe for majority of the day and added padding dirt. -S. Canfield

9-29-2023: Backfilled resource with appropriate subsoils and added topsoil. Most restoration is complete with seeding and matting, but dam and pump is still in place and they have a few touchups within the stream bed to make following day. Pipe remains to be installed adjacent to the resource, so the LB buffer areas weren't restored today. -S. Canfield

9-30-2023: Post-con assessment questions complete. The check dams in the stream will be removed Monday and filter sock will be placed around the wetland. Take postcon photos Monday, 10-2-23. -S. Canfield

10-3-2023: Check dams removed, and restoration completed. -B. Fennell

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	Bill Fennell *Print Name*	Bill Fennell *Signature*	10/03/2023 *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: Pipe lowered into trench and trench boxes installed for safety.

Photo Description: Trenchbreaker installed.

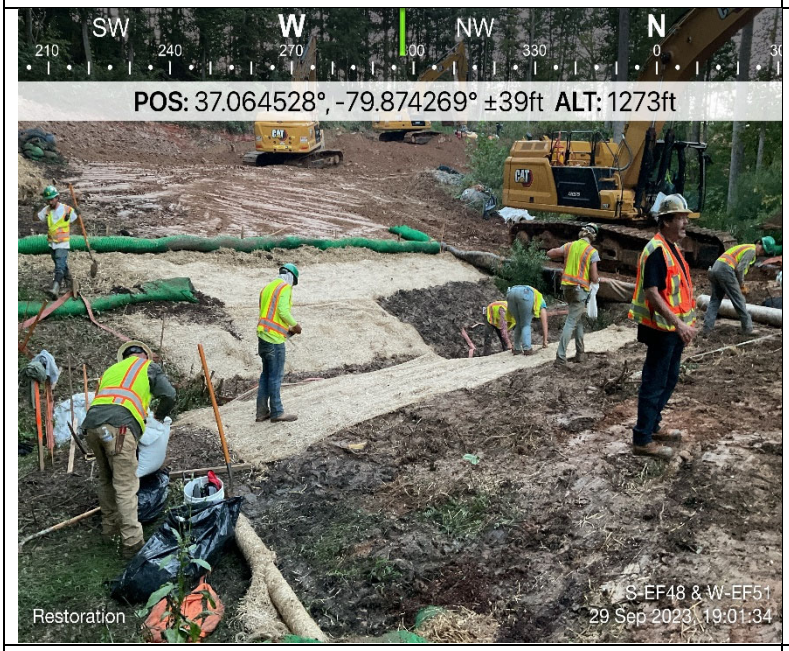

Photo Description: Restoration crews applying seed & stabilization matting to resource banks.

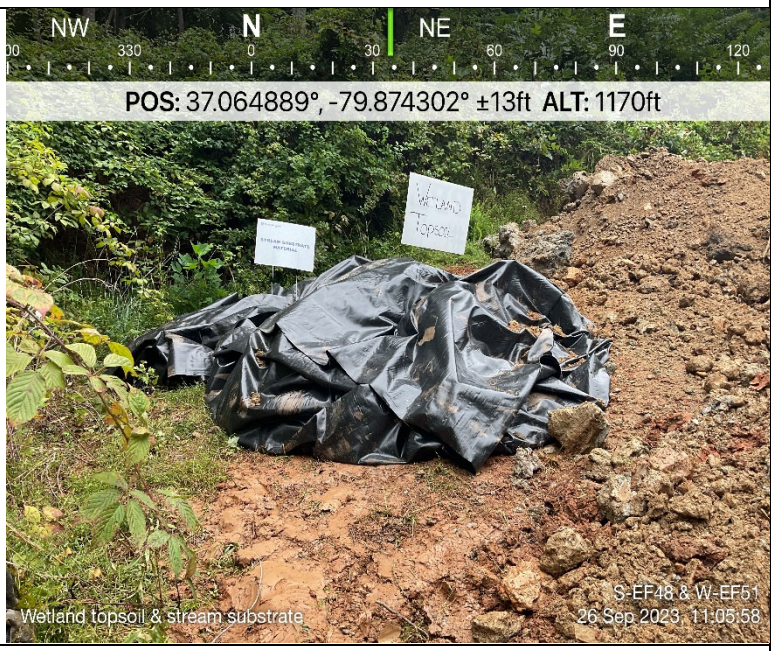

Photo Description: Stream substrate and wetland topsoil stockpiled separately from subsoil.