STREAM BIOLOGICAL CONDITIONS
ENVIRONMENTAL AUDITOR REPORT

Version 2.3

Wetland Studies and Solutions, Inc.® a DAVEY company

Stream ID: S-KL52	**Crossing Start Date:** 09/28/2023	**Crossing Completion Date:** 10/04/2023
Milepost: 268.3	**Pre-Con Assessment Date:** 09/24/2023	**Post-Con Assessment Date:** 10/06/2023
Station: 14176+09	**Stream Classification:** Ephemeral **(Perennial, Intermittent, Ephemeral)**	**Bankfull Width (ft.):** 1
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, 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):** *Bedrock, Boulder (>10"), Cobble (2-10"), Gravel (0.1-2"), Sand (<0.1"), Mud/Silt/Clay*	Mud/Silt/Clay	Mud/Silt/Clay
16.	**Channel Conditions:** **Rating:** *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.	**Riparian Buffer Zone within ROW and ≤50 ft. from Stream Top-of-Bank:** **Rating:** *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.	**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

Comments/Remarks

9-24-2023: Pre con meeting: EI- Steven Barber, Foreman- Nathan Summers
Will do test drills today but nothing more due to rain and finishing up at S-KL51. -T. Snideman

9-25-2023: No work in the resource. Pre-construction auditor assessment completed. -T. Snideman

9-26-2023: Removed upland topsoil from 50 ft buffer on CIS, started ditching in upland area. -T. Snideman

9-27-2023: Dug the trench in upland area on CIS of stream, began welding. -T. Snideman

9-28-2023: Built the dam and pump within resource, removed 12 inches of topsoil, removed streambed substrate, segregated topsoil/substrate and stored separately from subsoil. Excavation effort started hitting rock, so crew had to switch to hammering. Flume installed for overnight crossing maintenance. -T. Snideman

9-29-2023: Continue hammering rock for trench. Trench completed and lowering in section of pipe, crew finished two welds. – T. Snideman

9-30-2023: Crew was waiting for welding X-ray QC and made two additional welds. -T. Snideman

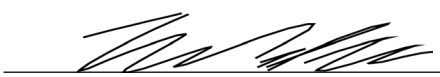
10-02-2023: Finishing final weld, partial backfill within resource. -T. Snideman

10-03-2023: Continued backfilling, Installed one trench breaker, coated weld, installed second trench breaker. -T. Snideman

10-04-2023: Finished backfilling the trench, clean-up, restored banks on both sides of stream, restored 12 inches of topsoil on left and right banks, spread temporary and permanent seed, installed straw-matting, installed compost filter sock at 10 and 50 ft buffers, restored streambed material, and removed crossing methods to restore stream flow to resource. -T. Snideman

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

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	Traci Snideman *Print Name*	 *Signature*	10/06/2023 *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: Topsoil stockpiles with stabilization.

Photo Description: Trench excavated, and pipe lowered in.

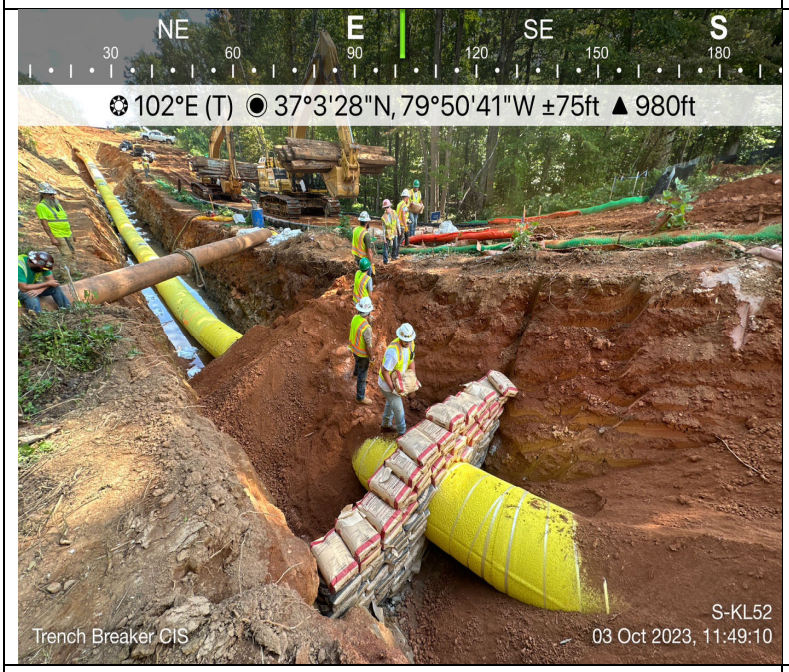


Photo Description: Trench breaker installation on coming in side of stream resource. Flume remained installed during crossing activities.

Photo Description: Restoration and stabilization of resource impact area.