STREAM BIOLOGICAL CONDITIONS ENVIRONMENTAL AUDITOR REPORT

Wetland

Studies and Solutions, Inc.

a DAVEY € company

Version 2.3

Stream ID: S-EF4	Crossing Start Date: 09/18/2023	Crossing Completion Date: 09/25/2023		
Milepost: 259.8	Pre-Con Assessment Date: 09/15/2023	Post-Con Assessment Date: 09/25/2023		
Station: 13728+02	Stream Classification: Perennial (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 11		
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? Yes Mussel Relocation? N/A		Х	
2.	Is this resource designated a wild or stockable trout stream?			Χ
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?		am & Pun	ıp
4.	Was the top 1-foot (12-inches) of streambed substrate segregated and stockpiled separate from trench spoils?		Х	
5.	Was excess material not needed for backfill removed and disposed of in an upland area?		Х	
6.	Was the top 12-inches of backfill made with clean native stream substrate?		Х	
7.	Was the pre-construction survey data provided and utilized during restoration in attempt to re-establish pre-construction contours?		Х	
8.	Were any field modifications to the stream implemented by project or regulatory personnel to address potential drainage or bank restoration limitations?			Х
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?		Х	
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?		Х	
11.	Was the time of disturbance minimized by conducting resource work continuously to completion?		х	
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?		Х	
13.	Are bareroot saplings required and/or scheduled to be planted for the dormant season $(10/1 - 4/30)$?		х	
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.			Χ

L	confective actions implemented in the comments section and mediate additional prioross.		
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	Cobble (2-10")	Cobble (2-10")
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)	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-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.	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)	2 - Suboptimal	1 - Optimal
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

07/10/2023: Timber mat bridge replacement. Pre-con assessment performed. 9-15-2023 Pre-Con Meeting EI: David Johnston Tie in foreman: William Martin EA: Kwame Bryant New pre-construction assessment performed. 9-18-2023: Topsoil removed from 50 ft buffer zone and separated/stockpiled separately from subsoil. -K. Bryant 9-19-2023: Substrate removed and separated from topsoil. Excavation of left bank. -K. Bryant 9-20-2023: Stream dam and pump set up, fish relocation performed. Found rock in stream bed. Drilling and then blasting. -K. Bryant 9-21-2023: Excavation of stream bed rock and excavation of trench. -K. Bryant 9-22-2023: Stream trench completed and prepped, lowered in pipe, repairing stream bed and repairing buffer zone with topsoil and substrate. -K. Bryant 9-24-2023: Welding and cutting/fitting pipes. QC tests completed. -K. Bryant 9-25-2023: Crossing and resource restoration was completed and stream flow returned. Post-construction assessment completed. – K. Bryant No impacts to biological conditions or unauthorized discharges were observed during the crossing.

This report was written by Kwame Bryant
Print Name

Kwame Bryant
Signature

09/25/2023
Date

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.

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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: Upstream dam used throughout crossing.

Photo Description: Survey crew staking out bank elevations

for restoration.