Wetland

Studies and Solutions, Inc.

a DAVEY € company

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Stream ID: S-RR09	Crossing Start Date: 10/23/2023	Crossing Completion Date: 10/31/2023
Milepost: 252.7	Pre-Con Assessment Date: 10/21/2023	Post-Con Assessment Date: 11/01/2023
Station: 13352+23	Stream Classification: Ephemeral (Perennial, Intermittent, Ephemeral)	Bankfull Width (ft.): 9
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		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?		Dam & Pump, Flume	
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.			Х

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)		3 - Marginal
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.)	3 - Marginal	3 - Marginal
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

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Comments/Remarks

El on-site is Austin.

10/21/2023- Pre-con meeting and pre-con auditor assessment completed. - S. Frost

10/22/2023- No work in the 10 ft buffer or resource area. -S. Frost

10/23/2023- Dam and pump, energy dissipater installed, and cobble removed from stream bed. Stream substrate and cobble removal and segregation. Stop to forward progress was called due to potential pipe re-engineering outside of the 10 ft buffer. -S. Frost

10/24/2023- Active work resumed, and contractor continued trenching through buffer area. Relaying separated soils to their appropriate stockpiles. -B. Fantauzzi

10/25/2023- Prepping to lower-in stream section of pipe. Pipe lowered into trench and pipe end welding was completed. -S. Frost

10/26/2023- X-ray completed on the C.I.S. Weld was coated and jeep tested completed. Final section of pipe installed on the G.A.S. - S. Frost

10/27/2023- Welding started and completed on the G.A.S. - S. Frost

10/28/2023- X-ray, coating, jeep test completed for welds. Partial backfill started on C.I.S. Trench breakers completed and subsoil backfilled. Stream and 10ft buffer restoration set for 10/30/2023. - S. Frost

10/30/2023- Relaying soils to their appropriate location for restoration of stream and buffer areas. Subsoil backfill completed. ECD's installed for potential overnight rain. Final restoration postponed to 10/31/2023. -S. Frost

10/31/2023- Flume pipe removed, and dams left in place for restoration effort. Banks and 10ft buffer topsoil restoration completed. Stream substrate restored to final grade as directed by survey team/data. Final contours re-established. Cobble returned to stream bed. Seeding and stabilization matting installed. Upstream and downstream dams removed for flow to return. 10 ft buffer restored. Post-con auditor assessment to be completed on 11/1/23. - S. Frost

11/1/2023- Post-con assessment completed. - S. Frost

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.

This report was written by	Summer Frost	6000	11/02/2023
	Print Name	Signature	Date



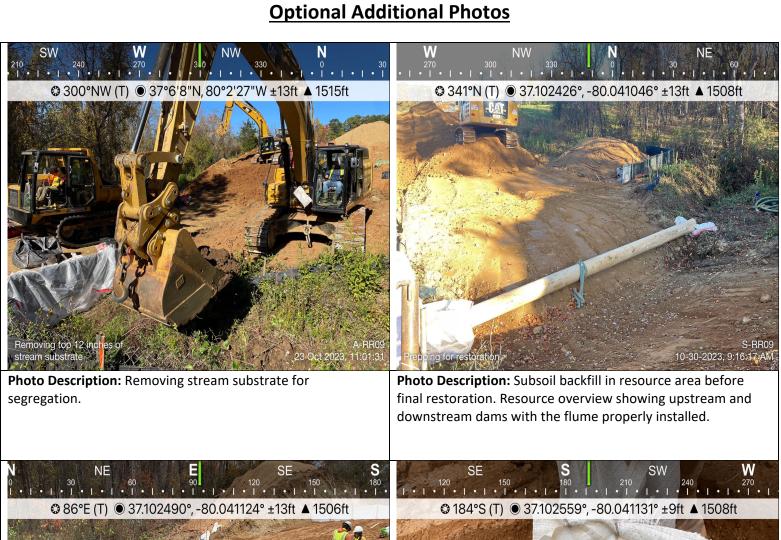


Required Photos



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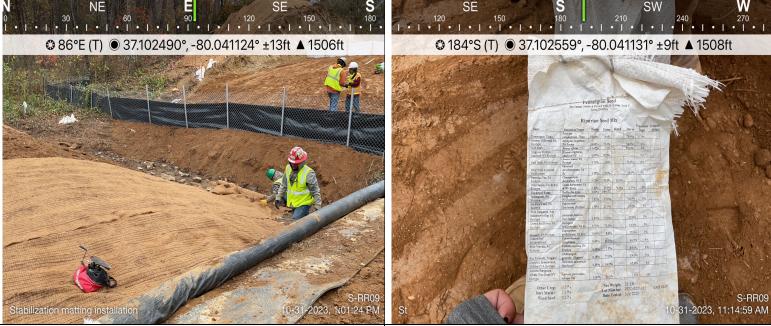


Photo Description: Installing stabilization matting and pins

after seeding inside of the 10ft buffer area.

Photo Description: Seed tag for stream bank stabilization