



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread D	AFE	124300132	Spread	H-600 Pipeline Spread D
Contractor	Precision	Report #	163		
Environmental Auditor	Gary Cruz			Date/Time	1/22/2024 10:32 AM
Wetland ID	W-IJ55	Crossing Start Date	1/11/2024	Crossing Completion Date	1/23/2024
Milepost	112.89	Pre-Con Assessment Date	1/11/2024	Post-Con Assessment Date	1/23/2024
Station	5960+43	Cowardin Classification	PEM	Wetland Impact Area(acs)	0.0218
State	WV				
County	Nicholas				

Resource Post-Crossing Conditions

1	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?	Yes
2	Was the existing vegetation removed prior to initiating land disturbance within the resource?	Yes
3	Was the top 1-foot (12-inches) of wetland soil segregated and stockpiled separate from trench spoils?	Yes
4	Was excess material not needed for backfill removed and disposed of in an upland area?	Yes
5	Was the top 12-inches of backfill made with clean native wetland topsoil?	Yes
6	Were standard decompaction practices (disking, plowing, cultivating, tilling, or incorporation of organic matter into the topsoil horizon) implemented prior to applying seed?	Yes
7	Was wetland topsoil replaced and temporarily seeded?	Yes
8	Was permanent seed applied to unsaturated wetlands?	Yes
9	Was equipment/timber matting removed from the wetland area properly by vertically lifting, and not pulling through the impact area?	Yes
10	Were impervious trench breakers/plugs properly installed within 25-feet of the resource to prevent subsurface erosion to or from the resource area?	Yes
11	Was the pre-construction survey data utilized during restoration in attempt to maintain the original surface hydrology, and were contours re-established to pre-construction conditions to maintain overland flow patterns?	Yes
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?	Yes
13	Was the time of disturbance minimized by conducting resource work continuously to completion?	Yes
14	Does the post-construction square footage of wetland area appear to be restored to meet or exceed the pre-construction area square footage?	Yes
15	Are bareroot saplings required and/or scheduled to be planted for the dormant season (10/1 – 4/30) in PFO classified wetlands?	N/A
16	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.	No

Biological Conditions

		Pre-Con		Post-Con
17	Wetland Saturation: Are surface waters, the water table, and/or overall soil saturation present? (Select Yes or No)	Yes		Yes
18	Resource Alterations: Are the wetland soil conditions visibly disturbed? Examples: Livestock presence, haul roads, farm traffic, drain tiles, recent mowing/clear cutting, recent excavating/disking of soils, etc. Rating: 1-Negligible (undisturbed/natural resource), 2-Minor (20-40% of resource disturbed by alterations), 3-Moderate (40-80% of resource disturbed), 4-Poor (>80% of resource disturbed)	1		4
19	Is vegetation present within the permitted impact area prior to disturbance? (Pre-Con)Are areas properly seeded and stabilized after restoration? (Post-Con) Rating: 1-Optimal (60-100% heavy vegetative cover), 2-Sub-optimal (30-60% mixed vegetative coverage), 3-Marginal (<30% vegetative coverage), 4-Poor (Mowed/maintained area or farmland, impervious area, sparsely vegetative coverage, etc.)	1		4

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Additional Notes

1/11/2024 to 1/13/2024 – Due to the proximity of wetland W-IJ55 to stream crossing S-IJ62, many of the activities between the two crossings were conducted in conjunction with the other feature. On the 11th, the two welds on the going away side (GAS) of the stream from the previous day were x-rayed and coated, while the topsoil from wetland W-IJ55 was removed and blasting operations were conducted shortly afterwards. The following day the excavation of the ditch through W-IJ55 was completed, while a section of pipe that extended from the GAS of the wetland to the coming in side (CIS) of the stream was lowered in and the stream end of the pipe was welded. On the 13th, a short section of pipe extending from the CIS loose end of the wetland to the CIS edge of the wetland was lowered in and welded.

1/14/2024 – No work was conducted due to weather.

1/15/2024 – The section of pipe that was welded onto the CIS of the stream on the 12th was x-rayed and coated while the final section of pipe crossing the wetland was lowered in and welded on the CIS of the wetland.

1/16/2024 – No work was conducted due to weather.

1/17/2024 – The final weld on the GAS of the wetland was completed.

1/18/2024 – The welds on the CIS and GAS of the W-IJ55 were x-rayed, while the trench through and on the GAS of stream S-IJ62 was being padded and backfilled. Bentonite trench breakers were installed on either side of the stream crossing at station numbers 5962+01 & 5962+27, while a trench breaker on the GAS of the wetland was installed at station number 5960+79. The stream section of the ditch was backfilled to within the top 12" of grade.

1/19/2024-1/20/2024 – No work was conducted due to weather.

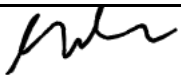
1/21/2024 – The final two welds on the CIS & GAS of the wetland were coated, while most of the efforts of the day were concentrated on the restoration of stream S-IJ62. The upland area between S-IJ62 and W-IJ55 was backfilled to grade, along with W-IJ55 being backfilled with its subsoil to within 12" of grade.

1/22/2024 – A bentonite trench breaker was installed on the CIS of the wetland at station number 5960+27. The wetland topsoil was replaced, and all elevations were verified by survey to pre-construction specifications.

1/23/2024 - Erosion control devices were installed on the boundaries of the wetland and the proper seed mix was applied to the disturbed areas of the wetland.







Conditions 18 & 19 were given a rating of 4 due to the lack of vegetation in the disturbed permitted impact area following completion of the crossing and restoration efforts. Wetland W-IJ55 topsoil was properly stabilized, and the disturbed areas were seeded with the appropriate permanent seed mix in accordance with Appendix B: Restoration Work Plan of the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework.

In accordance with the Mountain Valley Pipeline Comprehensive Stream and Wetland Monitoring, Restoration and Mitigation Framework, 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.

Name	Signature	Company	Date
Gary Cruz		SWCA	1/23/2024

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Required Photos

			
GPS Location	See photo above	GPS Location	See photo above
Description	View of permitted resource impact area during pre-construction assessment.	Description	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment.
			
GPS Location	See photo above	GPS Location	See photo above
Description	View of permitted resource impact area during post-construction assessment.	Description	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment.
			
GPS Location	See photo above	GPS Location	See photo above
Description	Removing the top 12" of wetland topsoil.	Description	Wetland ditch line has been excavated.

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Optional Photos

			
GPS Location	See photo above	GPS Location	See photo above
Description	Wetland section of pipe lowered in the ditch line.	Description	Impervious trench breaker being installed on the GAS of wetland.
			
GPS Location	See photo above	GPS Location	See photo above
Description	Wetland has been backfilled to within 12" of grade.	Description	Replacing the top 12" of wetland topsoil.
			
GPS Location	See photo above	GPS Location	See photo above
Description	All elevations being verified by survey to pre-construction specifications.	Description	Contractor installing erosion control devices around the wetland.