Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread C	**AFE**	124300131	**Spread**	H-600 Pipeline Spread C
Contractor	Precision			**Report #**	122
Environmental Auditor	Curtis Barbacci			**Date/Time**	11/7/2023 9:25 PM

Wetland ID	W-H86	**Crossing Start Date**	10/31/2023	**Crossing Completion Date**	11/7/2023
Milepost	89.43	**Pre-Con Assessment Date**	10/31/2023	**Post-Con Assessment Date**	11/7/2023
Station	4721+75	**Cowardin Classification**	PEM	**Wetland Impact Area(acres)**	0.0013
State	WV				
County	Webster				

	Resource Post-Crossing Conditions	
1	Were equipment mats or other suitable methods utilized under heavy equipment to minimize soil compaction and disturbance in wetlands?	N/A
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?	N/A
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)	No	No
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.)	2	4

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Additional Notes

Expanded notes: Due to the size, shape, and positioning of wetland W-H86, the entire wetland was impacted during construction.

10/31/23: The top 12-inches of wetland soil was removed, segregated, and placed on a barrier in an upland area. The wetland soil was encompassed with silt fence to prevent soil mixing and proper signage was posted. The contractor excavated the bell hole on the going away side (GAS) of W-H86 by the end of the day.

11/01/23: The contractor coated and applied rock shields to the pipe in a nearby upland area. The ditch was excavated from loose end to loose end on both sides of W-H86. The bottom of ditch line was padded with sandbags prior to the pipe being lowered into the trench.

11/02/23: The contractor completed both welds on the coming in side (CIS) and GAS of wetland W-H86. The tie-in weld on the GAS of the wetland was x-rayed.

11/03/23: X-ray and coating operations were completed prior to installing bentonite trench breakers on the CIS and GAS of the wetland at station number 4721+73 and 4721+99 respectively. Padding and backfilling activities began and carried on for the remainder of the day.

11/4/23: The trench was backfilled to within the top 12” of grade for wetland W-H86.

11/5/23: No work was conducted on Sunday.

11/6/23: Wetland W-H86 boundaries were re-staked by survey.

11/7/23: Survey verified that the top 12” of topsoil for wetland W-H86 was restored to pre-construction elevations and contours. The contractor reinstalled the proper erosion control devices per the erosion and sedimentation control plans near the wetland boundaries.

Conditions 18 and 19 were given a rating of 4 due to lack of vegetation in the disturbed permitted impact area following the crossing and restoration efforts. The W-H86 PEM topsoil was 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
Curtis Barbacci		SWCA	11/7/2023

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Required Photos

GPS Location	See photo
Description	View of permitted resource impact area during pre-construction assessment. Facing towards CIS of W-H86

GPS Location	See photo
Description	At edge of LOD, view of unimpacted resource area conditions during pre-construction assessment. Facing towards GAS of W-H86.

GPS Location	See photo
Description	View of permitted resource impact area during post-construction assessment. Facing towards CIS of W-H86

GPS Location	See photo
Description	At edge of LOD, view of unimpacted resource area conditions during post-construction assessment. Facing towards GAS of W-H86.

GPS Location	See photo
Description	View of roughly 12-inches of wetland topsoil stripped near other upland soils.

GPS Location	See photo
Description	View of roughly 12-inches of wetland topsoil stripped near other upland soils.

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Optional Photos

GPS Location	See photo
Description	View of segregated topsoil from the wetland encompassed with silt fence.

GPS Location	See photo
Description	View of ditch line dug through upland and wetland H-86.

GPS Location	See photo
Description	View of contractor lowering in pipe to make tie-in weld.

GPS Location	See photo
Description	View contractor applying coating to tie-in weld on going away side of the wetland.

GPS Location	See photo
Description	View of padding material being added within ditch line and over trench breakers on going away side of W-H86.

GPS Location	See photo
Description	View of padding dirt installed within ditch line. Contractor continues to backfill over ditch line and trench breakers.