



Wetland Biological Conditions EA Report

Project Name	H-600 Pipeline Spread B	AFE	124300130	Spread	H-600 Pipeline Spread B
Contractor	Precision	Report #	64		
Environmental Auditor	Joe Ventura			Date/Time	9/21/2023 12:33 PM
Wetland ID	W-B46	Crossing Start Date	9/22/2023	Crossing Completion Date	10/12/2023
Milepost	45.98	Pre-Con Assessment Date	9/21/2023	Post-Con Assessment Date	10/12/2023
Station	2427+86	Cowardin Classification	PEM	Wetland Impact Area(acres)	0.1255
State	WV				
County	Lewis				

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?	See Below
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	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)	3	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.)	4	4

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Additional Notes

9/21/2023: Pre-construction assessment
The weather at the time of the preconstruction assessment was 55 degrees Fahrenheit and sunny. The wetland soil in the proposed crossing area was saturated following recent precipitation. The proposed crossing area will also include the bore pit for the south side of the bore crossing of the adjacent public road and the wetland has had an equipment mat travel lane installed and left in place for multiple years (information provided by the environmental inspector) which was just recently moved off the wetlands. Due to this the previously matted area of the wetland had poor vegetative cover and was degraded relative to the surrounding wetland area in geomorphic positioning. Excluding the previously matted area, vegetation was well established in the wetland. - J.Ventura

9/22/2023
The weather was sunny and the temperatures high was 75 degrees Fahrenheit. The first 12 inches of wetland topsoil was separated and segregated away from the trench spoils and the trench was excavated. Two trench boxes were installed on the Northside of the wetlands. - J.Ventura

9/23/2023
The weather was overcast to rainy, with a high of 60 degrees Fahrenheit. The crew leveled out the floor of the trench as well as added pea gravel to the floor. In addition, the crew installed a pump to dewater groundwater from the trench. Finally, the crew placed construction mats at the bottom of the trench, tracks and piping for the boring machine. - J.Ventura

9/25/2023
The weather was overcast with a high of 75 degrees Fahrenheit. The crew lowered the boring equipment into the trench and started to bore north towards the road. They completed the section of the bore and removed equipment from the excavation before ending the day. - J.Ventura

9/26/2023
The weather was mostly sunny while in the afternoon turned to overcast with a high of 73 degrees Fahrenheit. Crew lowered in boring machine to punch through the final 10 ft of sediment. After completing the section, the crew removed the boring equipment from the trench. - J.Ventura

9/27-9/30/2023
The crew worked on welding pipe segments for the road bore section and pushing completed segments through the bore casing. At the completion of construction efforts on each day, the contractor removed the boring machine and placed in a nearby upland staging area. - J.Ventura

10/2/2023
The contractor worked on excavating the trench through the adjacent access road and adjacent upland area to prepare to tie-in the road bore with the previously installed crossing for stream S-B67 and wetland W-B47. No construction activity or ground disturbance was observed in the previously crossed resources. - R.Ellis


10/3-10/7/2023
The wetland crossing remained open while pipe was installed through the adjacent access road and tied into the previously installed pipe section through stream S-B67 and wetland W-B47. On 10/7 the contractor completed work on the tie-ins and began padding the pipe with sifted subsoil in preparation for backfill. - C.Winchester

10/9 Backfill of subsoil over pipe underneath wetland commenced. - C. Biden

10/10 Backfill continued and concluded. Wetland soil has begun to be added and replaced back to grade. - C. Biden

10/11 The contractor replaced the original 12" of segregated wetland topsoil to the wetland area and graded it to the correct contour. Erosion and sediment controls were then installed around the wetland. Conditions 18 and 19 were given a rating of 4 during post-construction assessment due to lack of vegetation in the disturbed permitted impact area following the completion of the crossing and restoration efforts. The disturbed wetland area has been 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. -C Biden

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
Joe Ventura		ERM	10/12/2023

Required Photos					
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GPS Location	See photograph	GPS Location	See photograph
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 photograph	GPS Location	See photograph
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 photograph	GPS Location	See photograph
Description	This photo shows the contractor working on removing the wetland from the topsoil prior to excavating the trench.	Description	This photo shows the excavated trench in the wetland with trench boxes installed.

Optional Photos

 <p>W-B46 MVP-B JVentura 26 Sep 2023, 5:50:55 PM</p>	 <p>North Elevation W-B46 MVP-B JVentura 29 Sep 2023, 6:21:00 PM</p>
<p>GPS Location See photo</p>	<p>GPS Location See photo</p>
<p>Description This photo shows the pipe installed through the road bore section north of the wetland.</p>	<p>Description This photo shows the pipe installed through the road bore section north of the wetland.</p>
 <p>W-B46 MVP-B JVentura 03 Oct 2023, 09:12:27 EDT</p>	 <p>W-B46 MVP-B JVentura 05 Oct 2023, 08:23:20 EDT</p>
<p>GPS Location See photo</p>	<p>GPS Location See photo</p>
<p>Description This photo shows the excavated trench through the wetland and adjacent access road.</p>	<p>Description This photo shows the excavated trench through the wetland and adjacent access road.</p>
 <p>W-B46 MVP-B JVentura 06 Oct 2023, 08:44:42 EDT</p>	 <p>W-B46 MVP-B JVentura 10/10/23 18:27:46</p>
<p>GPS Location See photo</p>	<p>GPS Location See photo</p>
<p>Description This photo shows the contractor working on welding the tie-in section to connect the road bore and adjacent stream crossing.</p>	<p>Description The photo shows the backfilled soil and the removal of the equipment mat travel lane through wetland feature.</p>