

City of Green – NEXUS Environmental Observations

Date: 08/31/2018

Environmental Inspector(s): Ad Zil Jim Gf

Weather & Soil Conditions: Sun and Clouds; 78°F; 5-10 mph winds; dry and wet soils

Observed from: Road R/W Within NEXUS R/W

Item/Location	BMPs	Y	N	N/A	Notes
Street Cleaning	Street Cleaning Evident	X			Regular Street cleaning evident. Street cleaning observed on Mayfair Rd during the walk-through.
	No Tracking Observed	X			
	Street Cleaning Equipment Staged	X			
Rock Entrances	Properly Topdressed	X			
	Check Dams in Ditchline	X			
Sediment Control Devices	Properly Installed	X			Maintenance of erosion/sediment control devices ongoing (*see notes for details and maintenance was ongoing the same day).
	Functional	X			
	No Maintenance Recommended		X		
	No Additional SCD Recommended	X			
Stabilization Timeframes	No Areas Idle >14 Days	X			
	No Areas Near S and W Idle	X			
	No Additional TS Recommended	X			
Equipment Bridges	Fabric and Sideboards Intact		X		Sideboards damaged at Nimisila Creek Crossing during pipe installation; repair should be made as soon as possible. Nexus EIs notified by Randy Burke (Nexus) during site walk-through.
	Equipment Gates Installed	X			
	Free of Sediment	X			
	No Maintenance Recommended	X			
Streams and Wetlands	Equipment Bridge Installed (S)	X			Stream and wetland crossings in progress north of Greensburg Rd, between S Arlington and Killinger, and west of Comet Rd (see notes for details and required maintenance). All stream and wetland crossings east of C15-104 (mile Post 36.3) are now completed. Silt fence reinstalled at previously completed stream and wetland crossings and seed applied.
	Filter Fabric and Sideboards		X		
	Timber Mats Utilized (W)	X			
	Equipment Gates Re-installed	X			
	E/SCDs Installed and Functional		X		
	SCD Reinstalled After Crossing		X		
	No Turbidity or Sedimentation	X			
Maintained R/W Restrictions	X				
General R/W	Good Housekeeping	X			Dewatering activity through filter bags, straw bale/filter fabric structures, and sprinkler systems evident throughout the City of Green. A well point system was being installed east of S Arlington during the walk-through. Pumps and fuel cans were stored in secondary containment near environmental resources. Waterbars, sumps, and J-hooks were installed and functioning. Signage remained mostly installed and visible.
	Topsoil Segregated	X			
	E/SCD Functional	X			
	No SCD Maintenance Needed		X		
	Proper Dewatering	X			
	Water Bars Installed	X			
	RUMA Signage Installed	X			
	S&W Signage Installed	X			
Refueling Signage Installed	X				
Trenching And Lowering In	S&W Impacts Avoided			X	Tie-in activity (stream and wetland, driveway, and utility crossings, etc.) was observed throughout the City of Green. See notes for details.
	Timber Matting Utilized	X			
	Entrances Topdressed	X			
	Street Cleaning Evident	X			
	Soil Stored Separate from Topsoil	X			
	Trench Plugs Installed	X			
Restoration	Topsoil Topmost Layer	X			Cleanup and restoration in progress along the ROW east of Mile Post 35.7 (just west of I-77) during the site walk-through.
	E/SCDs Reinstalled		X		
	No Areas Idle >14 Days	X			

BMP: Best Management Practice **CWC:** Concrete Wash Containment **DB:** Drivable Berm **EB:** Equipment Bridge **ECM:** Erosion Control Matting **EG:** Equipment Gate **E/SCD:** Erosion/Sediment Control Device **FS:** Filter Sock **GH:** Good Housekeeping **GR:** General Recommendation **H/SR:** Hard/Soft Restoration **IP:** Inlet Protection **MD:** Minimized Disturbance **PRT:** Potential Roost Tree **RCE:** Rock Construction Entrance **S:** Stream **SB:** Straw Bale **SF:** Silt Fence **TM:** Timber Mat **TP:** Trench Plug **TS:** Temporary Stabilization **VB:** Vegetated Buffer **W:** Wetland **WB:** Water Bar **WSC:** Wet-saw Slurry Containment

Key Observations: 1. Multiple stream and wetland crossings were active during the walkthrough. Several had been completed since the last walk-through. 2. Erosion and sediment control device maintenance required at multiple locations within the City of Green.

Notes:

A full site walk-through was performed with Randy Burke (Nexus). The entire project area within the City of Green was observed.

Mainline pipe installation had previously been completed and trench backfilled throughout the entire City of Green. Tie-in activity remains in progress.

The road bore under I-77 had previously been completed. Mainline had been tied-in to bore pipe since the last site walk-through. ROW cleanup and restoration was in progress in this area during the walk-through.

ROW cleanup and restoration was in progress throughout the ROW east of Mile Post 35.7 (just west of I-77).

- Restoration completed east of Mile Post 34.6. Seed applied, sediment controls re-installed, and good germination observed. Straw applied in upland area east of wetland A15-71.
- Crew installing de-coupler wire and vertical anode bed near Mile Post 34.7. No dewatering was observed in this area.
- Final grading in progress near Mile Post 35.1.
- Restoration completed, seed applied, and sediment control devices re-installed between Mile Post 35.1 and I-77.
- Cleanup in wetland A15-90 west of I-77 occurring on timber mats.
- Erosion and sediment controls re-installed at wetlands and streams.

Pot-holing via hydro-excavation in progress just east of Massillon Rd during the walk-through. Tie-in activity expected to follow.

Tie-in crew lowering in pipe along the upland ROW just north of the western Koons Rd crossing near Mile Post 39.1. Tie-in to road bore pipe expected shortly. Topsoil previously segregated and no environmental issues observed or expected.

1. All stream and wetland crossings had been completed east of I-77.
 - Topsoil segregated and backfilled as topmost layer.
 - Timber mats and bridges removed in Wetland A15-71 and between I-77 and Mayfair.
 - Seed applied, erosion control matting installed along stream banks, and sediment control devices re-installed as needed.
- Cleanup in progress at Wetland A15-90 crossing at Mile Post 35.6 during the site visit.
 - Topsoil backfilled as topmost layer.
 - Timber mat removal in progress.
 - Silt fence re-installed at Wetland boundaries.
 - Wetland seed (Annual Rye per FERC) applied.

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- Stream and wetland crossings in progress from Mile Post 36 to 36.8 (I-77 to Greensburg)
 - Activity occurring on timber matting.
 - Topsoil segregated and should be backfilled as topmost layer.
 - Flume crossing method utilized at streams A15-91-S1 (Mile Post 36.1) and at C15-106-S1 (Mile Post 36.7) during the walk-through to separate water flow from disturbance and minimize downstream sedimentation.
 - Trench plugs and river weights installed where trench remained open.
 - Pumps and fuel cans stored in secondary containment.
 - Cleanup crew working near Mile Post 36.1.
 - Coating crew observed near Mile Post 36.4.
- Stream and Wetland crossing in progress at A14-112 near Mile Post 39.9 west of S Arlington Rd.
 - Work occurring on timber matting.
 - Topsoil segregated and to be backfilled as topmost layer.
 - Pump around stream crossing method utilized.
 - Dewatering occurring into a straw bale and filter fabric dewatering structure via well-point system.
- Wetland crossing in progress at B15-128 at Mile Post 40 during the walk-through.
 - Topsoil segregated and stored separate from subsoil.
 - Trench plugs and river weights installed.
 - Sheet piling in use.
 - Pumps and fuel cans stored in secondary containment.
 - Dewatering occurring into filter bag.
- Stream and wetland crossings in progress between Comet and S Main during the walk-through.
 - Activity occurring on timber mats.
 - Topsoil segregated.
 - Pumps stored in secondary containment.
 - Nimisila Creek (A14-122-S2) crossing completed; banks replaced and flow restored. Installation of erosion control matting on Nimisila Creek stream banks in progress.
 - Replacement of torn filter bag in progress near Mile Post 41.9 within wetland A14-122.
 - A14-122-S5 stream crossing in progress; flume crossing method utilized.
 - A14-122-S1 stream crossing completed; bank replaced, flow restored, and erosion control matting and sediment control devices installed.
 - Trench plugs and river weights observed where trench remained open.
 - *See Key Observation #2 below for necessary maintenance throughout this area.

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No additional stream or wetland crossings were observed. All impacts to remaining streams and wetlands were minimal.

- Sediment control devices remained installed and functional along stream and wetland boundaries as needed.
- Topsoil will be segregated in remaining wetlands and streams during tie-in activity to limit the duration of disturbance.
- Equipment bridges and timber matting continues to be utilized for equipment travel through wetlands and streams with equipment gates installed or staged for re-installation as needed.
- Good containment and cleanup of sandblast material noted. Additional/as needed cleanup will occur prior to ROW cleanup per Randy Burke.

2. Sediment control maintenance was required at several locations within the City of Green following cleanup activity and at several streams and wetlands following tie-in completion. Randy Burke notified Nexus EIs during the site walk-through and maintenance was ongoing the same day or expected soon.

- A majority of the erosion and sediment control maintenance at stream and wetland crossings east of Mile Post 35 (Mayfair Rd) had been completed since the last site visit.
 - Banks of Stream A15-71-S1 are still awaiting installation of erosion control matting near Mile Post 34.7. Silt fence installed and no immediate environmental concerns.
- Silt fence reinstallation needed at stream and wetland crossings between I-77 and Greensburg Rd upon completion of pipe installation. A ROW cleanup crew was observed in the area.
 - Sediment controls damaged at Mile Post 36.2.
- Silt fence along the west boundary of the A17-5 stream and wetland complex appeared to have been undercut near Mile Post 38.3.
 - Some sediment migration off-ROW observed.
 - Repairs to be made and additional controls to be installed per Randy Burke.
- *Several locations between Comet Rd and South Main St required cleanup and erosion and sediment control maintenance. Randy Burke contacted Nexus EIs and some maintenance was underway during the walk-through.
 - Silt fence overtopped at Mile Post 41.6 just east of Comet Rd.
 - Sideboard of Nimisila Creek equipment bridge had been damaged during stream crossing at Mile Post 41.7.
 - Banks of Nimisila Creek awaiting installation of erosion control matting and re-installation of sediment controls (installation of erosion control matting in progress).
 - Gravel from river weights at Mile Post 41.7 and 41.9 should be removed from Wetland A14-122.
 - Stream 5 flume did not stretch across entire ROW and was discharging into the open trench. Flow in Stream 5 could not be verified due to the amount of activity occurring in the area and Nexus' request for EnviroScience to be kept away for safety reasons.
 - Filter bag at Mile Post 41.9 had been torn and was being replaced during walk-through.

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Dewatering was ongoing via well-point system west of S Arlington Rd. Installation of an additional well-point system was in progress east of S Arlington Rd in Wetland A14-112.

- Well-point dewatering was occurring into filter bag and straw bale dewatering structures at Mile Post 39.7 and 39.9.
- Evidence of dewatering into filter bags and straw bale dewatering structures observed throughout the entire City of Green.
- An additional sprinkler dewatering system was observed just north of Greensburg Rd since the last walk-through.
- Fuel cans and pumps for all dewatering were stored in secondary containment near environmental resources.

Hydrotest water release (approximately 2.5 million gallons) expected near Mile Post 41 upon completion of hydrotest of pipeline.

- Ohio EPA HydroTest Notice of Intent (HT NOI) permitting obtained per Randy Burke.
- Water sampling to be performed in accordance with HT NOI permit regulations.
- Large straw bale dewatering structure and filter bag expected to be utilized.

De-couplers had been installed at Mile Posts 34.8 and 35.2.

Valve installation just north of Killinger Rd appeared finished. Additional concrete and above ground work expected. Concrete washout water containment observed within the ROW.

Waterbars and drivable berms remained installed as needed along slopes and at stream and wetland boundaries as needed.

- Sumps and silt fence J-hooks remained installed at the low end of the waterbars to treat stormwater prior to it leaving the ROW. Sumps and J-hooks were functional and regular maintenance was evident.

Turtle Exclusion Fencing remained installed in Spotted Turtle Exclusion Areas.

- Wire fencing was utilized in areas of water flow to prevent flooding issues.
- Silt fencing had proper ground contact as needed.
- Turtle Exclusion fencing to remain installed until R/W re-vegetates per Randy Burke.

Regular street cleaning was evident throughout the entire City of Green. Street cleaning was observed at Mayfair Rd with a power broom during the walk-through.

General environmental observations from the site visit:

- Tie-in activities were in progress throughout the entire City of Green.
- Several stream and wetland crossings were in progress and several had been completed since last site visit.
- ROW cleanup and restoration was in progress east of Mile Post 35.6 during the walk-through.
- Well-point system near S Arlington Rd remained active with dewatering occurring into filter bags and dewatering structures. An additional well-point system was being installed east of Arlington Rd.
- Sediment control device maintenance and re-installation was required in a few locations along the ROW and Nexus EIs were notified same day.
- Regular street cleaning was evident throughout the entire City of Green.
- Silt fence and/or Belted Silt Retention Fence (reinforced silt fence) remained installed and functional along wetland and stream boundaries, within residential areas, and downslope of several agricultural fields.
- Timber mats remain installed at the equipment crossing locations of streams and wetlands. Temporary equipment gates were observed at stream and wetland crossings. Signage also mostly remained installed at the wetlands and streams which included refueling guidance due to the presence of environmental resources.
- Trench breaker installation was observed sporadically along the ROW. Permanent trench breakers are barriers installed in the open trench around the pipe and are intended to slow subsurface water flow and erosion along the trench and around the pipe in sloping terrain and around streams/wetlands to maintain hydrology.

Overall, our observations were satisfactory related to industry standards.

- The stream and wetland crossings being performed by the tie-in crews between Comet Rd and S Main St required maintenance and cleanup. However, some of the needed maintenance (filter bag replacement, installation of erosion control matting) was in progress during the walk-through. Randy Burke notified Nexus EIs during the walk-through and based on previously completed crossings we would expect cleanup to be performed to meet industry standards upon completion of tie-in activity.