

City of Green – NEXUS Environmental Observations

Date: 11/02/2018

Environmental Inspector(s): James G. Ad. Jd.

Weather & Soil Conditions: Overcast; 47°F; 10-15 mph winds; wet and saturated 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 Koons Rd and along the driveway near MP 38.6 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).
	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			All equipment bridges east of the eastern Koons Rd crossing had been removed.
	Equipment Gates Installed	X			
	Free of Sediment	X			
	No Maintenance Recommended	X			
Streams and Wetlands	Equipment Bridge Installed (S)	X			A small portion of Wetland A16-1 was awaiting backfill, a majority of the wetland had been backfilled since the last full walk-through. Several stream and wetland crossings were awaiting final restoration.
	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			Pumps and fuel cans were stored in secondary containment near environmental resources. Waterbars, sumps, and J-hooks were installed and functioning. Signage remained partially 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				
Restoration & Winterization	Topsoil Topmost Layer	X			Cleanup and restoration ongoing along the ROW. Winterization with cold weather seed and straw mulch is expected along the R/W where restoration has not yet been completed.
	Adequate Mulch Cover	X			
	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

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Key Observations: 1. Erosion and sediment control device maintenance required at multiple locations within the City of Green. Two items from the previous walk through on 10/12/18 had not yet been addressed. 2. Minor settling within road berm observed at the Comet Rd crossing. 3. Minor slip observed on the slope west of Comet Rd.

Notes:

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

A minor portion of Wetland A16-1 near Mile Post (MP) 40.7 was awaiting backfill. Most of the Wetland had been backfilled since the last site walk-through and all sheet piling was removed.

Restoration had been completed within the City of Green east of MP 37.8 (the eastern Koons Rd crossing). Sheet piling and timber matting had been removed, sediment controls re-installed, seed applied, and straw applied to upland areas. Good germination was observed where restoration had previously been completed.

ROW cleanup and restoration was ongoing throughout the ROW west of MP 37.8 (eastern Koons Rd crossing).

- Fertilizer and straw bales had been staged along the R/W between the eastern Koons Rd crossing and Thursby Rd for application following replacement of topsoil.
- A grade crew was staged at the western Koons Rd crossing (MP 39). Work was expected to resume upon more favorable (dry) soil conditions.
- A crew was removing timber matting within Wetland A14-122 east of S Arlington Rd (MP 39.7). Silt fence remained installed along the Wetland boundaries and no equipment travel was observed through the wetland upon removal of timber matting.
- A crew was installing line markers/cathodic station west of Arlington (MP 39.8).
- Subgrade was completed and topsoil replaced sporadically throughout the ROW west of MP 37.8 (eastern Koons Rd).

The wetlands near Apple Ridge Rd (MP 40.7) and along the ROW between Comet and S Main (MP 41.6-42.1) are expected to be restored with all timber matting removed by the end of November. The remainder of the ROW within the City of Green where restoration has not yet been completed will be winterized with cold weather seed and straw mulch. Topsoil will be replaced and final restoration performed in the spring of 2019. If topsoil has not been replaced in farm fields at the time of winterization, seed and straw will be utilized unless the landowner does not allow it and a variance is issued by FERC.

All stream and wetland crossings had been completed.

- Sediment control devices remained mostly installed and functional along stream and wetland boundaries as needed.
- Topsoil was segregated in wetlands and streams and backfilled as topmost layer.
- Trench plugs had been installed at stream and wetland boundaries as needed prior to backfill.
- Equipment bridges and timber matting continued to be utilized for equipment travel through wetlands and streams with equipment gates installed or staged for re-installation as needed.

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- The following stream and wetland crossings had been properly restored following tie-in completion and are awaiting timber mat removal and final cleanup.
 - C15-123 (MP 38)
 - A17-5 S&W Complex (MP 38.3)
 - C15-113 (MP 38.7)
 - F15-1-S1 (MP 39.3)
 - A14-112-S1-A (MP 39.5)
 - A14-112 S&W Complex (MP 39.7 and 39.9)
 - B15-128 (MP 40)
 - A16-1 S&W Complex (MP 40.7)
 - A14-122 S&W Complex (MP 41.7 to 42.1)
- Restoration and final ROW cleanup had been completed in streams and wetlands east of Mile Post 37.8.
 - Topsoil segregated and backfilled as topmost layer.
 - Timber matting and bridges removed.
 - Sediment control devices re-installed as needed.
 - Wetland seed (Annual Rye per FERC) applied. Erosion Control Matting (ECM) installed along stream banks.
 - Good germination observed.

1. Sediment control maintenance was required at several locations within the City of Green.

- Silt fence damaged at MP 36.2.
- Silt fence damaged at MP 36.6.
- Silt fence damaged at MP 37.1.
- Silt fence damaged in Wetland C15-120 at MP 37.5.
- Water bar overtopped, J-Hook undercut, and minor sedimentation into Wetland A17-5 at MP 38.3 and 38.4.
- Water bar overtopped at MP 38.8.
- Silt fence damaged in several locations from MP 39.9 to MP 40.
- Silt fence damaged along Wetland B15-128 boundary at MP 40.
- Silt fence damaged at MP 40.3, 40.5, 40.6, and 40.7.
- Additional silt fence needed along Nimisila Reservoir boundary at MP 41.
- A majority of the erosion and sediment control maintenance items from the 10/12/2018 walk-through had been completed as needed since the last walk-through.
 - Banks of Stream C15-120-S1 at MP 37.4 restored with ECM.
 - Silt fence repaired at MP 37.8.
 - J-Hook repaired and additional sediment controls installed at MP 38.3.
 - Water bar/silt fence repaired and minor sedimentation off ROW removed at MP 38.7.
 - Minor sedimentation off ROW cleaned up at MP 39.8.
 - Silt fence reinstalled along west boundary of Wetland A14-112 at MP 39.9.
 - Silt fence repaired at MPs 40.3, 40.5, 40.6, 40.7, and 41.
- Two erosion and sediment control maintenance items from the 10/12/2018 walk-through had not yet been addressed.
 - Silt fence damaged in Wetland C15-120 at MP 37.5.
 - Silt fence damaged at MP 40 along Wetland B15-128 boundary.

2. Minor settling in the road berm was observed on the east side of the Comet Rd crossing (MP 41.5). There are no current *environmental* issues as all erosion and sediment controls remained installed and functional in the area and no erosion or sedimentation issues were observed. Silt fence had been installed along the toe of the slope above the roadway and inlet protection had been installed at the nearby catch basin. Cold weather seed had been applied along the ROW upslope of the roadway per Randy Burke. This area will continue to be monitored during weekly site visits and full site walk-throughs.

3. Some additional slipping was observed (migration of soil down the slope) on the slope just west of Comet Rd (MP 41.6), however, it had not significantly worsened since the 10/12/2018 site walk-through. There are no current environmental issues as some germination was observed, erosion control matting, silt fence, and water bars remained installed, and no sedimentation issues were observed off ROW or within a wetland or stream at this location. This area will continue to be monitored during site walk-throughs. Touch-up restoration may be needed to establish soil stability if the slip worsens and germination does not occur.

Dewatering was ongoing near MP 39.1. A lack of dewatering BMPs was observed in this area during the walk-through and minor erosion had formed along the R/W downslope of the dewatering activity. There are no current environmental issues as the erosion had formed along the upland R/W away from all environmental resources. Repair should be considered prior to winterizing the ROW in this area.

- Fuel cans and pumps for dewatering were stored in secondary containment near environmental resources where dewatering equipment and materials remained staged.

De-couplers had been installed at Mile Posts 34.6, 34.8, 35, 35.2, 35.4, 35.5, 35.6, 36, 36.3, 36.4, 36.5, 36.8, 36.9, 41.4, 41.5, and 41.6.

Above-ground valve installation just north of Killinger Rd had been completed. Concrete work and fencing installation completed. A gravel access drive had been partially installed.

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 mostly 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.

Regular street cleaning was evident throughout the entire City of Green. Street cleaning was observed at W Koons Rd and along the driveway near MP 38.6 with a power broom during the walk-through.

General environmental observations/notes from the site visit:

- Restoration activity was observed throughout the City of Green since the last walk-through. Restoration had been completed east of Mile Post 37.8.
- All well-point systems had been deconstructed and demobilized.
- Sediment control device maintenance and re-installation was required at several 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.
- The remainder of the ROW within the City of Green where restoration has not yet been completed is expected to be winterized with cold weather seed and straw mulch. Topsoil is expected to be replaced and final restoration performed in the spring of 2019.
- Inspections will continue on a weekly and rain event frequency through winter until all restoration is finished in 2019 per Randy Burke.