

**Site/Project Location:** MP 75 to 92 Spread 7-8

**Date of Inspection:** 13 September 2016

Inspected roughly 13 miles of pipeline ROW approximately 17 miles south of Beulah ND in Mercer County.

**Observed Work / Weather Conditions**

On-site 1:30 pm to 6:15 pm. Mostly sunny skies/unrestricted visibility. SE wind at 10-15 mph. No precipitation during visit. ROW dry with standing/flowing water at waterbody crossings. Temperature 54-59°F.

Construction activities were shut down during site visit. Pipe was generally in trench with exception at few locations. Trench was backfilled with subsoil back to subgrade on majority of ROW. Multiple open trench areas filled with water. Many areas on ROW where ROW boundary survey stakes were not visible. Exclusion zones were labeled with yellow signs and colored pennant string flags.

**Top Soil Management / Condition / Erosion Control / Stormwater Management**

Topsoil and subsoil segregation was adequate for most the ROW inspected. Topography was generally steep, rolling hill landscape. Topsoil depth was 1-3" in some areas while other areas were as much as 12". One area had a dozer drive over the topsoil and subsoil piles, causing a mix. Three (3) areas exist where subsoil on vegetation was also observed typically in 20-25 foot strips and likely occurred during initial topsoil segregation. Other very limited areas of mixing appeared to be associated with installation of stormwater slope breaks after trench backfill. Storm-water BMPs, particularly silt fences, need minor maintenance i.e. re-stapling or replacement performed near a few waterbody crossings. Storm-water BMPs overall were properly installed and in good working condition. ROW drainage points protected with straw bales or silt fence.

**Vegetation Condition**

Tree removal areas appeared to be narrowed consistent with PSC order. All waterbodies crossings observed complete. Trenched crossings all had straw blankets on disturbed surfaces. Very few tree/shrub areas noted.

**Depth of Cover / Road Crossings / River Crossings / Riparian Condition at HDD Bore Sites**

Open trench areas observed and measured were at specified depth or deeper. Two water crossings noted with narrowed work areas with riparian vegetation protected by silt fences. No active HDD operations noted. Roughly 30 foot wide access road was created between the Knife River bore pads using matted bridge pads.

**Other Project Issues**

Landowner at Sec 15 T142 R89 reported Project damaged one of two private water lines. Temporary repair in place. Permanent repair pending. (Note: PSC already aware of incident and follow-up is in progress.)

**Deficiencies**

Three (3) short areas of topsoil / subsoil missing or subsoil piled on vegetated surfaces. One area had a heavy equipment drive over mixing topsoil and subsoil piles. Some silt fences needing re-stapling.

**Actions Taken/To Be Taken**

Will look for inspection results and prompt repair next time stormwater inspections documents are checked.

**Keitu Inspector:** RJS

**Inspection Report Submitted:** 15 September 2016

**Report Photo #1 "Topsoil Driven over, Soils Mixing at M.P. 92":**

46.99060°N 101.79373°W



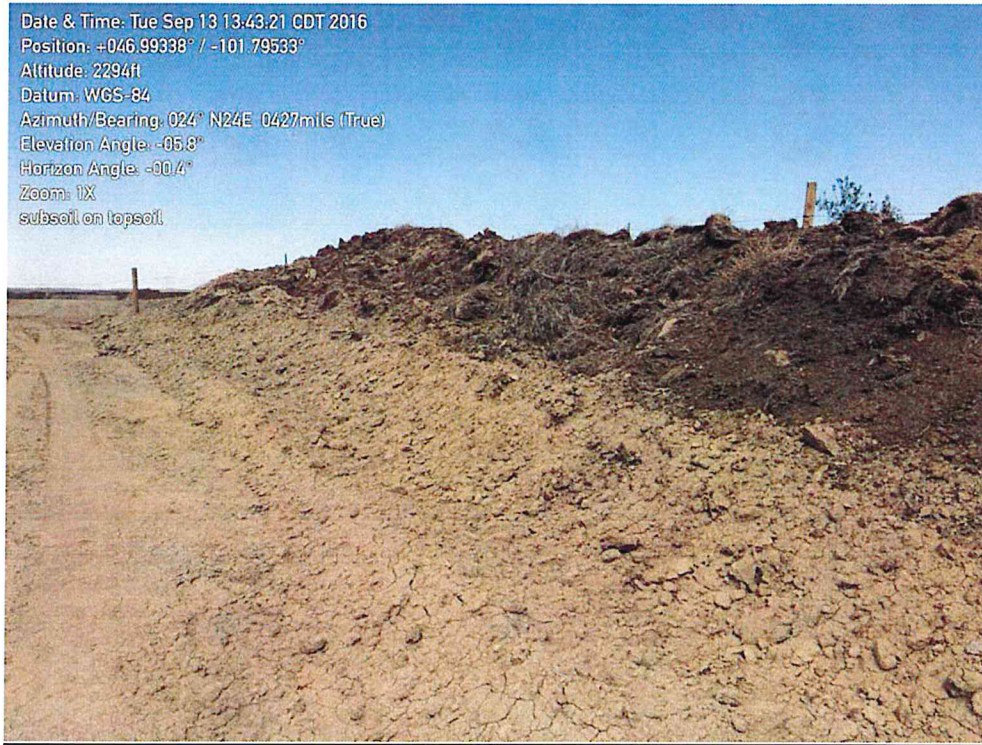
**Report Photo #2 "Silt Fences Down":**

46.99269°N 101.79491°W



**Report Photo #3 "Subsoil Plowed onto Topsoil at M.P.91.25:**

46.99338°N 101.79533°W



**Report Photo #4 "Trench Filled with Standing Water:**

47.00485°N 101.80253°W



**Report Photo #5 "Subsoil On Top of Vegetation, No ROW Stakes":**

47.06115°N 101.86956°W



**Report Photo #6 "Adequate Topsoil-Subsoil Separation":**

47.06528°N 101.87543°W



**Report Photo #7 "Knife River Crossing":**

47.171389°N 102.003889°W



**Project Map Inspection Location:**

South of Beulah, ND

