

Site/Project Location: Denbury 12-inch Cedar Hills Pipeline

Date of Inspection: 6 July 2021

Keitu staff visited the Denbury 12-inch Cedar Hills Pipeline Project for a start of project topsoil inspection at the location being cleared where boring underneath Little Beaver Creek was to take place. Inspection of construction sites to focus on (1) confirming surface disturbance/work occurring within ND PSC-approved work corridor and/or route; (2) topsoil segregation occurring; (3) vegetation removal consistent with tree & scrub mitigation plan.

Observed Work / Weather Conditions

Visit occurred between 1:00pm and 4:00pm. The weather was cloudy, temperature at 73°F, winds at 8-12 mph out of the northeast and no precipitation.

The 12-inch Cedar Hills Pipeline Project kicked off its construction in North Dakota at the time of the visit. A bulldozer stripped the topsoil in a pasture to clear the area in preparation for the machinery that will be used to bore the pipeline underneath Little Beaver Creek. Soil was not stripped past the point where subsoil was visible. The location of the bore site is located on the NE ¼ of Section 7, Township 132N, Range 106W in Bowman County, North Dakota.

Top Soil Management / Condition / Erosion Control / Stormwater Management

A bulldozer started stripping topsoil in the area where machinery will be staged to bore pipe underneath Little Beaver Creek. Topsoil depth varied from 6-12 inches deep at the boring location. The bulldozer operated carefully removed the topsoil until the subsoil layer became visible and moved the topsoil into a berm on the west side of the cleared area. The subsoil was not removed, so the topsoil pile was kept segregated on the west side of the cleared area.

The bulldozer operator demonstrated proper understanding of the rules and regulations for topsoil removal and removed the topsoil to a depth where the subsoil started to appear. Multiple passes were made over the same ground to remove the topsoil in increments to smoothly strip the topsoil layer at proper depths across the varying contours of the field.

Vegetation Condition

No evidence of tree or shrub removal was noted as the project site was located in a field used for pastureland.

Deficiencies

Deficiencies were not found at the time of inspection.

Actions Taken/To Be Taken

Topsoil segregation was noted to be acceptable at this time in the areas observed. Equipment operator was reminded to strip soil, where it existed, down to a maximum of 12 inches or to the depth where subsoil appeared. Equipment operators have demonstrated proficiency in topsoil removal and segregation in compliance with the Commission's Order.

Keitu Inspector: ZAP

Inspection Report Submitted: 16 July 2021

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Construction Inspection Report
Keitu Engineers & Consultants, Inc.

Report Photo #1 "Bulldozer Stripping Topsoil for HDD Bore at Little Beaver Creek"



Report Photo #2 "Topsoil Pile on the West Side of the Cleared Area"



Report Photo #3 "Topsoil Stripped for HDD Boring Activities"



Site Location Map

