

November 28, 2018

Executive Secretary
North Dakota Public Service Commission
600 E Boulevard Ave., Dept. 408
Bismarck, ND 58505-0480

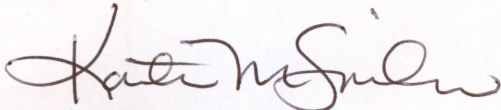


Revegetation and Reclamation Inspection Report
Dakota Access, LLC
Dakota Access Pipeline Project
ND PSC Case No. PU-14-842

In accordance with your request, Keitu Engineers & Consultants, Inc. (Keitu) is pleased to submit for your use two hardcopies of the Dakota Access Pipeline Project, Revegetation and Reclamation Report.

Keitu appreciates the opportunity to work with you on this project and I hope this report meets with your complete approval. If you have questions or comments, please contact me at the phone number above or via email at kspilman@keitu.com.

Sincerely,



Kathleen M. Spilman, P.E.
Managing Director

Enclosure: Construction Inspection Report

Reclamation and Revegetation Inspection Report

Dakota Access Pipeline Project

Dakota Access, LLC

ND PSC Case No. PU-14-842

Prepared for:

North Dakota Public Service Commission
Public Utilities Division
State Capitol
600 East Boulevard – Dept. 408
Bismarck, ND 58505-0480



November 2018

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Executive Summary

The State of North Dakota, acting through its North Dakota Public Service Commission (Commission), Division of Public Utilities, has contracted Keitu Engineers & Consultants, Inc. (Keitu) to perform consulting services for Reclamation and Revegetation Inspection. This report addresses the inspection, findings concerning issues requiring resolution, areas of concern, recommendations for resolution of issues, and a determination whether the area affected by construction activities has been restored as near as practicable to the condition as it existed prior to the beginning of construction, including the establishment of desired plant species where applicable in Case No. PU-14-842.

The Dakota Access Pipeline (Project) spans Mountrail, Williams, McKenzie, Dunn, Mercer, Morton, and Emmons Counties, North Dakota. The Project is owned and operated by Dakota Access, LLC (Dakota Access). Construction for the Project began in January 2016 and was completed in May 2017. The purpose of the Reclamation and Revegetation Inspection was to ensure the Project was constructed in compliance with the siting laws, rules, and the applicable Commission Order Amending Certificate and Permit for the Project. Prior to the construction inspection, Keitu reviewed all Project documents to identify aspects requiring site verification.

This report covers the most recent Project inspection on November 15, 2018 by Keitu staff when the right-of-way was spot checked visually to document conditions associated with its revegetation & reclamation.

The Project appears to be returned as near as practical to preconstruction conditions at the time of visit. Overall, the project was very well-maintained, secured, and in good condition. Keitu listed one item to be addressed at the Commission's discretion, specifically continuation of active maintenance including herbicide application in the Project right-of-way. This item is listed in the Recommendation section of this report. If the recommendation is followed, the Project should continue to be as near as practical to pre-construction conditions.

Introduction

The Dakota Access Pipeline (Project) was a multi-year project, constructed in 2016 and 2017. Operated by Dakota Access, LLC (Dakota Access), the Project is a pipeline that begins in Stanley, North Dakota and extends 358 miles where it exits the state near Westfield, North Dakota. The Project consists of 12-, 20-, 24-, and 30-inch diameter pipeline and six crude oil terminals along the route. The Project is under the jurisdiction of the North Dakota Public Service Commission (Commission), which issued its original Order Amending Certificate and Permit for Case No. PU-14-842 on January 20, 2016.

Purpose and Scope of Inspection

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Commission to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and welfare of the citizens of North Dakota. Construction inspections ensure the Project is constructed in compliance with siting laws, rules, and the applicable Commission Order.

The Commission retained Keitu Engineers & Consultants, Inc. (Keitu) to provide field inspections during and after construction of the Project, including the completion of a Reclamation and Revegetation Inspection.

The inspection process includes a review of the Application for Amended Corridor Certificate and Route Permit Application (Application), Order, Certification Relating to Order Provisions Certification, and other applicable documents to determine Project-specific siting and construction requirements; a site visit and inspection of facilities; documentation of compliance; and a report summarizing findings. This report includes, but is not limited to, site visit observations, documentation of compliance deficiencies, and a summary of issues that should be addressed for the Project to be considered complete and in full compliance.

Methods

Keitu reviewed North Dakota siting laws and rules, the Application, Certification, and the Order for the Project to identify what Project-specific documentation was required for compliance. Keitu then reviewed Project documents in the Commission Online Case Search to identify those siting laws, rules, and Application and Order assertions that already had written verification, those that still required documentation, and those that required physical site verification.

Per established practice, the Reclamation and Revegetation inspection is conducted only after at least one full growing season has transpired.

Keitu staff visited the Project area on November 15, 2018 to visually inspect the site and included site visits in Emmons, Morton and Mercer Counties. During the field visit, construction was complete and the project was in operation. Digital photographs were taken showing typical Project infrastructure and documenting any problem areas.

As-Built Inspection Follow-Up

An As-Built inspection was previously conducted on July 24 and 25, 2017 by Keitu staff. During this inspection, several deficiencies were identified relative to the siting laws, siting rules, and applicable Commission Orders.

Deficiencies included issues dealing with improper notification of unanticipated discoveries, taking out of additional trees and/or shrubs not consistent with their Tree and Shrub Mitigation Plan, and terminal construction outside of Commission approved site plans.

There were no items that needed to be addressed from the As-Built Inspection that related to the Revegetation and Reclamation Inspection.

Observations

Project areas occurring in crop lands appeared to be largely returned to pre-construction conditions at the time of visit. Cropland density appeared to be similar within the Right-of-Way (ROW) as it is adjacent to the ROW. Portions of the Project occurring in range or pasture land had approximately 50-100% ground cover and generally is comprised of a different mixture of vegetative species than surrounding range and pastureland. It is noteworthy that seeding of these non-cropland areas involved a specific seed mixture as detailed in the Project's revegetation plan, and consistent with NRCS recommendations. However, some small areas of non-cropland appeared to have dominant undesirable species present, which unfortunately is common during the early stages of revegetation.

As noted previously in areas checked during the "As-Built" post-construction report, surface topography was restored to apparent pre-disturbance elevations in all areas checked. Even though they undesirable species of plants were evident, the disturbed land areas appeared to be stabilized and no evidence of sustained soil surface erosion was evident.

A series of photographs, depicting representative conditions of these observations, is incorporated into this report for reference.

Recommendation

Active maintenance, including herbicide application, should continue for at least another year to discourage growth of weeds or other undesirable species.

Conclusion

Overall, the Project appeared to be constructed as designed with minimal impacts to the surrounding environment. The Project site is in good condition and is well maintained. The Project is as near as practical to preconstruction conditions given the early stage of reclamation.

Management Review

The services performed by Keitu and its staff for this project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by professionals currently practicing in this area under similar time and budget constraints.

Recommendations and findings contained in this report represent our professional judgment and are based upon available information and technically accepted practices at the present time and location. Other than this, no warranty is implied or expressed.



11/26/2018

Kathleen Spilman, P.E. – Managing Director

Date

Report Photo #1: Typical ROW conditions in corn field. Vegetation appeared to be the same within the ROW as outside of the ROW.



Report Photo #2: Typical ROW conditions in sunflower field. Vegetation appeared to be the same within the ROW as outside of the ROW.



Report Photo #3: View of typical ROW across pasture and agriculture fields. Revegetation is not identical to adjacent land outside of ROW.



Report Photo #4: Typical ROW conditions in corn field. Vegetation appeared to be the same within the ROW as outside of the ROW.



Report Photo #5: Visible Project ROW across pastureland.



Report Photo #6: Visible Project ROW across pastureland.



Report Photo #7: Visible Project ROW across pastureland.



Project Map:

