

Post-Construction Inspection Report

10-inch Crude Oil Pipeline – Divide & Burke Cnty
Meadowlark Midstream Company, LLC

ND PSC Case No. PU-14-823

Prepared for:

North Dakota Public Service Commission
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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 post-construction inspections. This report addresses the Orders established by the Commission and issues established in Case No. PU-14-823.

The 10-inch Crude Oil Pipeline - Divide & Burke Cnty (Project) is located in Divide and Burke Counties, North Dakota. The Project is owned and operated by Meadowlark Midstream, LLC (Meadowlark). Construction for the Project began in June 2016. The purpose of the post-construction inspection was to ensure the Project was constructed in compliance with the siting laws, rules, and the applicable PSC Order for the Project. Prior to the post-construction inspection, Keitu reviewed all Project documents to identify any and all aspects requiring site verification.

The site was visually inspected on September 14, 2017 by Keitu staff. Overall, the project was very well-maintained, secured, and in good condition. It appeared to be constructed as planned with numerous efforts to minimize impacts. Vegetation appears to have returned to as near as practical to preconstruction conditions.

Introduction

The Project was approved and constructed in 2016. The Project is operated by Meadowlark Midstream Company, LLC (Meadowlark). The Project consists of approximately 46 miles of 10-inch crude oil pipeline and associated facilities in Divide and Burke Counties, North Dakota. The Project is under the jurisdiction of the North Dakota Public Service Commission, which issued its Order Amending Certificate and Permit for Case No. PU-14-823 on May 13, 2015.

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 Amending Certificate and Permit (Order).

The Commission retained Keitu Engineers & Consultants, Inc. (Keitu) to complete a post-construction inspection of the Project. The inspection process included a review of the Application for Amended Corridor Certificate and Route Permit (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 PSC 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.

Keitu staff visited the Project area on September 14, 2017 to visually inspect the site. Digital photographs were taken showing typical Project infrastructure and documenting any problem areas (starting page 7). The pipeline was in operation during the field visit.

Orders

The following section includes discussion of a list of components of the Project that were asserted in the Order which could be documented during the post-construction inspection to verify compliance with siting laws, rules, and the Order for the Project, via either written documentation or physical site verification. Included are detailed findings and observations from Keitu personnel involved in the post-construction inspection for the Project.

- 1. Order #2 - Certificate of Corridor Compatibility No. 166 is issued to Meadowlark, designating a corridor for the construction, operation, and maintenance of approximately 46 miles of 10-inch crude oil transmission pipeline and associated facilities in Divide and Burke Counties, North Dakota. The Corridor will consist of a 150-foot-wide area centered on the route.**

The Commission has designated a transmission facility corridor for Meadowlark for the construction, operation, and maintenance of approximately 46 miles of 10-inch diameter crude oil pipeline in Divide and Burke Counties, North Dakota. This certificate is issued in accordance with the Order of the Commission dated May 13, 2015 in Case No. PU-14-823 and is subject to the conditions and limitations noted in the Order.

Order #2 is complete.

- 2. Order #3 - Route Permit No. 178 is issued to Meadowlark designating a route for the construction, operation, and maintenance of 46 miles of 10-inch crude oil transmission pipeline and associated facilities in Divide and Burke Counties, North Dakota.**

The Commission has designated a transmission facility route for Meadowlark for the construction, operation, and maintenance of approximately 46 miles of 10-inch diameter crude oil pipeline in Divide and Burke Counties, North Dakota.

Order #3 is complete.

Certification

The following section includes discussion of relevant items included in the Certification attached by reference to original Order (Docket #37 in Case No. PU-14-823). This Certification was also reviewed with Meadowlark and a Commission representative during the preconstruction conference. As noted in the preconstruction conference, not all original 43 certification points are relevant to the post-construction inspection.

1. Certification Point 2 – Preconstruction Conference

A preconstruction meeting was held to ensure all contractors fully understand the conditions set forth in the Order. The preconstruction conference (Docket #44) was held on May 29, 2016. In attendance was Julie Prescott, representing the Commission, as well as representatives from Meadowlark and Keitu.

Certification Point 2 was followed.

2. Certification Point 5 – Intent to Begin Construction and Weekly Progress Reports

Meadowlark submitted a notice of intent to commence construction on June 3, 2015 (Docket #44). During construction, Meadowlark provided monthly project status updates.

Certification Point 5 was followed.

3. Certification Point 6 – Pipe Depth

Trench depth was checked during each of the construction inspections. Each spot checked met or exceeded the minimum depth requirements set forth by the Commission.

Certification Point 6 was followed.

4. Certification Point 20 - Tree and Shrub Mitigation Plan

An affidavit stating no trees or shrubs were disturbed as a result of construction of the Project. Any trees or shrubs encountered were bored under. This was filed with the Commission on November 10, 2016 as Docket #61.

Certification Point 20 was followed.

5. Certification Point 25 – Restoration and Reclamation

Disturbed areas of the Project visited during the post-construction inspection appeared to have been returned to as near as practical to the condition as it existed prior to the beginning of construction.

Certification Point 25 was followed.

6. Certification Point 29 - Landowner Contact

Meadowlark filed the contact information for landowner complaints relating to the Project with the Commission on June 1, 2015. (Docket #44)

Certification Point 29 was followed.

7. Certification Point 32 – As-Built Surveys

Electronic copies of the as-built surveys for the Project were filed with the Commission on November 10, 2016 in Docket #61.

Certification Point 32 was followed.

Observations

Construction was completed at the time of the visit. The terminal facilities were clear of vegetation and gravel covered. In grassland areas on the pipeline right-of-way (ROW), there was nearly 100% vegetative cover at the time of the field inspection. The only noxious weed found in the Project area was Canada thistle (*Cirsium arvense*). The number and density of this species did not appear to be any greater than areas outside of the Project area.

Cropland in the Project area appeared to have no lasting effects from construction. Crops appeared to be similar in density to areas outside of the Project area. Occurrence of noxious weeds and other undesirable plants did not appear to be any greater than areas outside of the pipeline ROW.

Conclusions

Overall, the Project appeared to be constructed as designed with minimal impacts to the surrounding environment. The Project site was in good condition and well maintained. Reclamation and revegetation appeared to have been returned to as near as practical to preconstruction conditions.

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.



10/4/2017

Jaimee Antognazzi, Operations Manager

Report Photo #1: Basin Transload and Global Partners' Basin Transload Rail Facility.



Report Photo #2: Revegetated ROW Looking Towards Terminal.



Report Photo #3: Typical ROW Condition in Croplands.



Report Photo #4: Typical ROW Conditions in Grasslands.



Report Photo #5: Valve Location. Note – Disturbed soil is a different project’s ROW.



Report Photo #6: Divide Pump Station at West End of Project.



Photo Location Map:

