



Responsive partner.
Exceptional outcomes.



July 1, 2015

Mr. Patrick Fahn

ND Public Service Commission
600 E. Boulevard Ave.
Bismarck, ND 58501

RE:

Salutation: Construction Inspection Report for Hess Ramberg Truck Facility Connect to Crude Oil Pipeline Project

Dear Mr. Fahn,

Enclosed are four (4) signed copies of the construction inspection report for the Hess Ramberg Truck Facility Connect to Crude Oil Pipeline Project PSC case number PU-12-683. Also provided is one (1) electronic copy of the report on CD for the project. The CD also includes original site inspection photos.

You can reach me at the office at 701-751-6141 or via email at lnelson@wenck.com if you have any questions.

Sincerely,

Wenck Associates, Inc.

50 **PU-12-683** Filed: 7/2/2015 Pages: 34
Final construction inspection report

Luke Nelson
Project Engineer

Wenck Associates, Inc.

[enc: Hess Ramberg Truck Facility Connect to Crude Oil Pipeline Project, 4 Signed Copies, CD]

**Hess Ramberg Truck Facility Connect
to Crude Oil Pipeline Project
Post-Construction Inspection Report
PU-12-683**



Prepared for:
**North Dakota Public Service
Commission**

600 E. Boulevard Avenue
Bismarck, ND 58505-0480



Responsive partner.
Exceptional outcomes.

Prepared by:

WENCK Associates, Inc.
301 1st Street NE, Suite 202
Mandan, ND 58554
Phone: 701-751-3370
Fax: 763-479-4242

Table of Contents

1.0 EXECUTIVE SUMMARY	1-3
2.0 BACKGROUND AND SCOPE.....	2-1
2.1 Introduction	2-1
2.2 Purpose	2-1
2.3 Methods and Scope of Inspection	2-1
2.3.1 Project Compliance Items Identified	2-1
2.3.2 Document Review	2-1
2.3.3 On-Site Inspection	2-2
3.0 FINDINGS.....	3-1
3.1 Siting & Location of Facility.....	3-1
3.1.1 Designated Location & Maps of Corridor	3-1
3.1.2 Siting Criteria	3-1
3.1.3 Land & Agricultural Impacts.....	3-1
3.1.4 Setbacks.....	3-1
3.2 Project Design & Engineering	3-1
3.2.1 Length & Infrastructure.....	3-1
3.2.2 Right-of-Way Corridor.....	3-1
3.2.3 Compliance with US DOT Regulations	3-1
3.2.4 Engineering Design Drawings.....	3-2
3.2.5 As-built Drawings and GIS Files	3-2
3.3 Pre-Construction	3-2
3.3.1 PSC-Required Documents.....	3-2
3.3.2 Pre-Construction Conference/Notice of Intent to Start Construction.....	3-2
3.3.3 PSC Approval of Modifications	3-2
3.3.4 Permits and Approvals from Other Agencies	3-2
3.3.5 North Dakota One-Call Participation.....	3-2
3.4 Cultural Resources	3-2
3.4.1 Cultural Site Avoidance	3-2
3.4.2 Mitigation Plans & Reporting	3-3
3.5 Natural Resources	3-3
3.5.1 Wildlife	3-3
3.5.2 Wetlands.....	3-3
3.5.3 Reporting	3-3
3.5.4 Reclamation & Reseeding	3-3
3.5.5 Tree & Shrub Mitigation	3-3
3.5.6 Noxious Weeds	3-3
3.6 Construction, Reclamation & Soils	3-4
3.6.1 Construction Management & Safety	3-4
3.6.2 Pipeline Depth	3-4
3.6.3 Erosion & Sedimentation	3-4
3.6.4 Soil Segregation & Staging	3-4
3.6.5 Graded Roads Bored.....	3-4
3.6.6 Reclamation & Roads.....	3-4
3.6.7 Fencing, Repairs & Waste	3-4
3.6.8 Underground Facilities	3-4

3.7	Operation	3-5
3.7.1	Safety & Record-keeping	3-5
3.7.2	Maintenance	3-5
3.7.3	Public Contact & Safety	3-5
4.0	ISSUES TO RESOLVE AND RECOMMENDATIONS.....	4-1
4.1	Project Specifications Needing Written Verification	4-1
4.2	Soil Replacement & Revegetation	4-1
5.0	CONCLUSIONS	5-1
6.0	REFERENCES	6-1
7.0	SIGNATURES	7-1

TABLES

Table 2-1:	Project Specifications with Written or Site Verification Information.....	2-3
------------	---	-----

APPENDICES

- Appendix A: Maps of Project
- Appendix B: Photographs
- Appendix C: Field Observation Points

1.0 Executive Summary

The North Dakota Public Service Commission (PSC) retained Wenck Associates, Inc. (Wenck) to complete a construction inspection of the Hess Ramberg Truck Facility Connect to Crude Oil Pipeline (Project) in Williams County, North Dakota (ND), constructed and currently operated by Hess Corporation, LLC (Hess). Construction for the Project was completed in January 2015. Wenck reviewed all Project documents to identify those aspects that required compliance, and visually inspected the Project area on 14 January 2015.

The Project was well-maintained and appeared to have been constructed as planned with numerous efforts to minimize impacts. However, there were several non-critical issues that may need to be resolved for the Project to be considered complete and in full compliance, including 1) written verification of some items, in particular, as-builts and associated GIS files, 2) complete filing of weekly construction reports, 3) grading, compaction, and seeding of the ROW construction area, , Follow-up actions taken by Hess to address these issues can be corroborated in writing or photos and will not require a subsequent site visit. Wenck recommends the PSC take the following steps to resolve these issues.

Recommended Action Steps

→Request Now

- As-built engineering drawings and associated GIS or AutoCAD files.
- Monitoring of areas with possible topsoil/subsoil mixing or inadequate topsoil replacement.
- Proper submission of Weekly Construction Reports for the entire construction process so that they are on file with the PSC in the Project's docket.

→Review Internally, Clarify, Then Request if Needed

- Several "potential" items may need written verification, but the PSC should review since some may not be needed or may be best verified in some other way (refer to list in Section 4.1).

→ Expect Later, Request if Needed

- Documentation of grading, compaction, and seeding in the ROW area.

2.0 Background and Scope

2.1 INTRODUCTION

The Hess Ramburg Truck Facility Connect to Crude Oil (Project) was completed in 2015 in Williams County, North Dakota (ND), west of Tioga, ND (**Appendix A, Maps**). The Project was constructed and is currently operated by Hess Corporation, LLC (Hess). The Project was the conversion of an existing 6.1 mile, 14-inch natural gas pipeline and two recently installed segments of 14-inch pipe gathering line, one 1.9 miles in length and one 2.2 miles in length, for a total of 10.2 miles, into a single transmission pipeline that will transport crude oil from the Ramburg Truck Facility (RTF) to the Tioga Rail Terminal (TRT). The Project is under the jurisdiction of the North Dakota Public Service Commission (PSC), which issued its Findings of Fact, Conclusions of Law, and Order in Case No. PU-12-683 on 13 November 2013, granting a Certificate of Corridor Compatibility No. 148 and Route Permit No. 159 for the Project.

2.2 PURPOSE

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service 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 the welfare of citizens of North Dakota. Post-construction inspections ensure that such projects are constructed in compliance with the siting laws (North Dakota Century Code Chapter 49-22) and rules (North Dakota Administrative Code Article 69-06) and the applicable Commission Findings of Fact, Conclusions of Law, and Order (Order). The North Dakota PSC retained Wenck Associates, Inc. (Wenck) to complete a construction inspection of the Project.

2.3 METHODS AND SCOPE OF INSPECTION

2.3.1 Project Compliance Items Identified

Wenck identified a list of "Project Specifications", which Hess were obligated or responsible to follow and that can be verified either in written documentation or by an on-site inspection. These items were taken from 1) siting laws and rules, 2) Project activities or specifications proposed in the Application for a Certificate of Corridor Compatibility and Route Permit (Application), 3) Project plans described in the Findings of Fact, 4) Orders, and 5) recommendations by other agencies. These Project specifications are listed in Table 2.1 under 7 categories: Siting & Location; Project Design & Engineering; Pre-Construction; Cultural Resources; Natural Resources; Construction, Reclamation & Soils; and Operation.

2.3.2 Document Review

Wenck staff reviewed publicly-available Project documents in the PSC Online Case Search (ND PSC 2015) to find written verification of compliance for the Project specifications listed in Table 2.1. If written verification was filed, the findings are described in Section 3 and the source and name of the documentation is listed in Table 2.1, Column 3 (Written Verification). Shaded boxes in the table represent Project specifications that are potentially non-compliant because they have no written verification.

2.3.3 On-Site Inspection

Luke Nelson, Wenck project engineer, visited the Project site on 14 January 2015. Senior Project Engineer Ben Lauf, from Hess, the company currently operating the pipeline, accompanied Wenck staff during the site visit.

The site was inspected visually by driving to access points and walking within the Project area at those points. Digital photographs (Canon Power Shot SD1300 IS, 12 megapixel) were taken showing typical Project infrastructure and documenting problem areas (**Appendix B**). Geographic coordinates were recorded at observation points or potential problem areas using a handheld Global Positioning System (GPS) (Garmin GPSMAP 60CSx; <10m accuracy; NAD83 datum) (**Appendix C**).

If on-site inspection of a Project specification was completed, the findings are described in Section 3 and referenced in Table 2.1, Column 4 (Site Verification). Shaded boxes in the table represent Project specifications that are potentially non-compliant based on site verification.

Table 2-1: Project Specifications with Written or Site Verification Information

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
SITING & LOCATION			
Application for Corridor Certificate and Route Permit, p. 1, 3, Appendix B	Designated location in Williams County, about 7.5 miles south of Tioga, ND.	Docket #6, Application; Docket #35, Late filed Exhibit 3	Section 3.1.1
ND Admin. Code Article 69-06-08; Corridor App. p. 14-19; Route App. p. 9-19; Findings of Fact 8, 11-15	Siting Criteria analysis – exclusion, avoidance, selection, and policy. No impacts to Selection Criteria or avoidance areas within corridor. Meets Policy Criteria.	Docket #6, Application	Section 3.1.2
Corridor App. p. 19; Route App. p. 15	Project will not impact agricultural land. No impacts to quality of cropland anticipated.	None	Section 3.1.3
Corridor App. p. 18	Setback of 500ft from occupied structures.	Docket #13, Map for publication; Docket #35, Late filed Exhibit 3	Section 3.1.4
PROJECT DESIGN & ENGINEERING			
Corridor App. p. 1; Route App. p. 1; Findings of Fact 4, 5	Authorized the conversion of 10.2 miles of 14-inch diameter existing underground pipeline to a crude oil transmission pipeline, construction of pumps and main line valves at tie-in locations, and above ground markers.	None	Section 3.2.1
Corridor App. p. 4; Route App. p. 5; Findings of Fact 8	A one-mile wide area centered on the existing pipeline alignment was evaluated for the siting criteria (study area), corresponding to the proposed corridor. Field surveys were conducted based upon a 200-foot wide ROW centered on the existing pipeline alignment and extended up to 350 feet in areas (survey area).	N/A	Section 3.2.2

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
Corridor App. p. 2; Route App. p. 3; Findings of Fact 21	Design, construction, and operation in compliance with US DOT 49 CFR Parts 194 and 195.	None	N/A
Certification 29	Provide engineering design drawings prior to construction upon request.	Docket #6, Application – Appendix A Engineering Documents	N/A
Certification 31	Provide as-built design specifications and associated GIS files within 3 months after construction complete.	None	N/A
PRE-CONSTRUCTION			
ND Century Code Ch. 49-22-07.1; ND Admin. Code Article 69-06-03	Letter of Intent.	Docket #1, Letter of Intent; Docket #2, Revised Letter of Intent	N/A
ND Century Code Ch. 49-22-08; ND Admin. Code Article 69-06-04	Application for a Certificate of Site or Corridor Compatibility and Route Permit.	Docket #6, Application	N/A
ND Century Code Ch. 49-22-07	Certificate of Site Compatibility or Route Permit.	Docket #41, Order with Certificate 148 and Route Permit 159	N/A
ND Century Code Ch. 49-22-04; ND Admin. Code Article 69-06-02	Ten-year Plan (submit before August 1).	Docket #6 Appendix F, 2012 Ten-year Plan; Case No. PU-12-683, 2012 Ten-year Plan	N/A
Certification 2, 5	Conduct Pre-construction Conference. Provide notice of intent to start construction.	Docket #46, Pre-construction Conference Minutes	N/A
Certification 33, 36	Inform Commission of plans to modify facility or adjust route and obtain approval. Any facilities not included in current Application must be applied for in a separate Route or Site Permit. Route adjustments require a specific filing procedure.	None filed to date	N/A
Certification 3, 4	Compliance with rules and regulations of other jurisdictional agencies. Obtain permits and approvals from other agencies	Docket #47, Compliance filing - permits	N/A



Responsive partner. Exceptional outcomes.

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
	and provide copies prior to applicable permitted activity.		
Certification 35	Participate in ND One-Call Excavation Notice System.	None	N/A
	CULTURAL RESOURCES		
Corridor App. p. 18; Route App. p. 8, 12, 14, 16, 25; Findings of Fact 9	Cultural resource sites determined ineligible for National Register of Historic Places and would not be affected due to limited ground-disturbing activities. SHPO concurrence provided with Application. No avoidance or mitigation necessary.	Docket #5, ND SHPO Concurrence	Section 3.4.1
Certification 11, 12	Submit cultural resource mitigation plans to SHPO prior to construction for approval. Report discovery of cultural, archeological, historic, etc. sites and stop construction, consult SHPO for clearance, and file report to PSC.	Docket #6, Application – Appendix E, Cultural Resources Report	Section 3.4.2
	NATURAL RESOURCES		
Route App. p. 6-7; USFWS (04-20-2011)	Limited displacement of wildlife due to construction and no significant impacts. No impacts expected to T+E or sensitive species. Project construction to occur outside migratory season for whooping cranes and outside the nesting season for bald and golden eagles and other migratory birds. Will comply with USFWS recommendations for minimizing wildlife impacts.	Docket #6, Application – Appendix D Natural Resource Report	Section 3.5.1
Route App. p. 6; Findings of Fact 17;	No permanent impacts to wetlands or waterbodies are anticipated. No PEM wetlands will be impacted by the project because of the absence of new construction outside the boundaries of the existing Hess RTF facility.	Docket #6, Application – Appendix D Natural Resource Report	Section 3.5.2
Certification 10	Report presence of T+E species, bald or golden eagles during construction and operation.	None reported to date	N/A
Corridor App. p. 19; Route App. p.22; Certification 17;	Reclamation, fertilization, and reseeded according to NRCS (or landowner if approved). USFWS request: reseed with grass/forb mixture of native species from local seed sources.	None.	Section 3.5.4



Responsive partner. Exceptional outcomes.

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
Route App. p. 6; Findings of Fact 24; Certification 20	Shrubland avoided to extent practicable. Tree and shrub removal and replacement will comply with "Tree and Shrub Mitigation Specifications".	Docket #6, Application – Appendix D Natural Resource Report	Section 3.5.5
Route App. p. 9, 25	Contractors required to clean equipment and materials prior to entrance to ROW to minimize spread of noxious weeds.	Docket #6, Application – Appendix D Natural Resource Report	Section 3.5.6
CONSTRUCTION, RECLAMATION & SOILS			
Corridor App. p. 22, 23; Route App. p. 18, 21, 28; Findings of Fact 25; Certification 5, 9, 15	Environmental monitors and inspectors utilized during construction. Construct and operate in accordance with Application and safety requirements. Construction suspended during adverse weather conditions. Provide weekly construction reports.	None	N/A
Route App. p 21; Certification 6	Pipeline buried to 48in in range land, 48in in cultivated land, 48in at the bottom of ditch for road crossings, and 72in in undeveloped section lines. Route App. specifies minimum 4ft soil cover on cultivated lands.	None	Section 3.6.2
Corridor App. p. 10, 11, 24; Route App. p. 21, 22; Certification 15-17	Soil disturbance is not anticipated other than a minor area within Hess property. However, soil erosion will be minimized as necessary by use of BMPs during and after construction to protect surface water and soils/topsoils.	None	Section 3.6.3
Corridor App. p. 24; Route App. p. 21, 22; Certification 16, 23	Soil disturbance is not anticipated other than minor areas at the ends of the pipeline route. However, if any excavation would be necessary, topsoil and subsoil must be segregated and replaced separately. No staging areas are anticipated on land of other ownership.	None	Section 3.6.4
Certification 13	Crossings of graded roads bored.	None	Section 3.6.5

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
Corridor App. p. 24; Route App. p. 19, 21, 22; Certification 14, 18, 19, 26;	No new roads or construction outside of Hess property is anticipated. However, temporarily disturbed areas and roads will be restored. Pre-existing roads restored to satisfactory condition. Restoration of area to pre-construction contours as soon as practicable upon completion of construction. ROW will be de-compacted per landowner request. Reclamation and maintenance throughout life of facility.	None	Section 3.6.6
Certification 21, 22 ,24	Temporary fences and gates will be installed as necessary. Repair/replace all damaged fences and gates. Repair/replace damaged drainage tile. Waste removed and disposed regularly.	None	Section 3.6.7
Certification 34	Underground irrigation or water lines and wells will be avoided or shutoff coordinated. Damage to underground facilities reported to PSC. Construction suspended until clearance to proceed.	None reported	N/A
OPERATION			
Corridor App. p. 24; Route App. p. 21, 22; Certification 8, 9, 24, 27	Construct and operate in accordance with Application and safety requirements. Maintain records of compliance with Order and Certificate of Site Compatibility. Extraordinary events (e.g. injuries, T+E wildlife fatalities) reported within 5 business days.	None reported to date	Section 3.7.1
Certification 24	Reclamation and maintenance throughout life of facility. Waste removed & disposed regularly.	None	Section 3.7.2
Certification 26, 27, 28	Cooperation with landowners/residents to mitigate adverse effects. Company's existing Emergency Action Plan will include the Project. Safety measures for traffic control or to restrict public access. Procedure for handling complaints.	None	Section 3.7.3

***Note: Shaded boxes represent non-compliance or potential non-compliance issue**



Responsive partner. Exceptional outcomes.

3.0 Findings

3.1 SITING & LOCATION OF FACILITY

3.1.1 Designated Location & Maps of Corridor

The Project was built generally as proposed in the designated location described in the Application.

3.1.2 Siting Criteria

Siting criteria were analyzed in detail in the Applications for the Project (Docket #6). Wenck confirmed during the site inspection that there were no exclusion or avoidance areas within the Project area. Wenck also confirmed that impacts to selection and policy criteria were considered and kept at a minimum.

3.1.3 Land & Agricultural Impacts

The Project was completed as proposed within the estimated construction ROW in the Route Application. As planned, there was no impact to agricultural lands since the Project was primarily a conversion of pipeline use and did not require moving or constructing pipeline. The minor area of ground disturbance required for the tie-in pumps and valves were on previously disturbed, industrial properties. Topsoil restoration, grading, and compaction within the ROW in these areas were not complete at the time of the field visit and will need to be completed once the ground thaws. Hess is aware of the needed repairs and stated that they would be completed in spring of 2015. (**Appendix B, Photos 3, 10**).

3.1.4 Setbacks

The Project was in a rural setting, with no occupied dwellings or structures along the pipeline route or within the ROW corridor, complying with the 500ft setback specified in the Application.

3.2 PROJECT DESIGN & ENGINEERING

3.2.1 Length & Infrastructure

The Project was authorized as the conversion of 10.2 miles of existing 14in diameter underground pipeline from gathering lines to crude oil transmission pipelines, as described in the Application and at the hearing. The site inspection observations coincide with these parameters. Aboveground markers were in place along the route and the pipeline tied into the Tioga Rail Terminal at its north end and the Ramberg Truck Facility on its south end (**Appendix A, Maps; Appendix B, Photos 2, 5, 6, 10**).

3.2.2 Right-of-Way Corridor

The Order for the Project authorized construction within the designated route and corridor. The pipeline appeared to have been constructed within the proposed route and corridor. (**Appendix B, Photos 2-6, 10**).

3.2.3 Compliance with US DOT Regulations

There was no written verification or certification of compliance with US DOT 49 CFR Parts 194 and 195.



Responsive partner. Exceptional outcomes.

3.2.4 Engineering Design Drawings

Engineering design drawings were provided in the Application materials.

3.2.5 As-built Drawings and GIS Files

As-built alignment drawings and associated CAD files (acceptable alternative to GIS) have not been received within three months after construction was completed.

3.3 PRE-CONSTRUCTION

3.3.1 PSC-Required Documents

A Letter of Intent was received on 13 August 2012 (Docket #1), and a revised Letter of Intent with a revised pipeline length was received on 24 August 2012 (Docket #2). The PSC moved that the one year waiting period between filing the Letter of Intent and the Application be shortened to 30 days (Docket #3, Commission Motion Acknowledging Letter of Intent). An Application for a Certificate of Corridor Compatibility and Route Permit was subsequently submitted on 26 November 2012 (Docket #6, Application). A Certificate of Corridor Compatibility No. 148 and Route Permit No. 159 were issued on 13 November 2013, in accordance with the Order and Certification Relating to Order Provisions signed by Hess on 22 July 2013 (Docket #41, Order). A Ten-Year Plan was filed as part of the Application (Docket #6, Appendix F, 2012 10-Year Plan).

3.3.2 Pre-Construction Conference/Notice of Intent to Start Construction

Record of the pre-construction conference was on file (Docket #46, Preconstruction Conference Minutes), however no notice was provided during the meeting of intent to start construction.

3.3.3 PSC Approval of Modifications

There were no notifications to modify the facility or adjust the route filed to date. Observations of on-the-ground infrastructure coincided with maps of the approved corridor.

3.3.4 Permits and Approvals from Other Agencies

There were no indications in the Applications that federal or local permits would be required for the Project. State agency permits identified as required for the Project (Docket #47, Compliance filing-permits) included:

- NDDH NDPDES General Permit for Stormwater Discharges from Construction Activity, Notice of Coverage – Ramberg Crude Stabilization Facility
- NDDH NDPDES General Permit for Stormwater Discharges from Construction Activity, Notice of Coverage – Tioga Rail Terminal

These permits were filed with the PSC as required.

3.3.5 North Dakota One-Call Participation

There was no written documentation that Hess participated in North Dakota One-Call.

3.4 CULTURAL RESOURCES

3.4.1 Cultural Site Avoidance

Completion of the Class I and III Cultural Resource Inventory found that no historic properties or significant sites were affected. The ND State Historic Preservation Office (SHPO) concurred with this recommendation (Docket #5, ND SHPO Concurrence Letter).



Responsive partner. Exceptional outcome

3.4.2 Mitigation Plans & Reporting

ND SHPO concurred with the Class I and III Resource Inventory which concluded no historic properties would be affected, and therefore a mitigation plan would not be required. No new discoveries of cultural, archeological, or historic sites have been reported to the PSC to date. Presumably no new sites were encountered during construction of the Project.

3.5 NATURAL RESOURCES

3.5.1 Wildlife

In general, it appeared Hess attempted to minimize impacts to wildlife and habitat. A natural resources survey was completed prior to construction which included a cursory assessment of wildlife, threatened and endangered species, and potential habitat (Docket #6, Application – Appendix D Natural Resource Report). It was determined that no threatened or endangered species would be affected during construction. The Project proposed alternative of converting existing pipelines rather than routing and constructing a new pipeline minimized impacts to wildlife.

3.5.2 Wetlands

A wetland determination during the natural resource survey (Docket #6, Application – Appendix D Natural Resource Report) indicated that no PEM wetlands would be impacted by the project because of the absence of new construction outside the boundaries of the existing Hess RTF facility. No wetland impacts were noted during the post-construction site visit.

3.5.3 Reporting

There were no reports documenting the presence of threatened or endangered species or bald or golden eagles during construction or operation filed to date. As of completion of this report weekly construction reports were not filed, however they were emailed to both the PSC and Wenck. These reports indicated that no environmental incidents or issues occurred during construction. The current reports held by Wenck do not encompass the project in its entirety.

3.5.4 Reclamation & Reseeding

At the time of the site inspection, the pipeline trench had been backfilled, soils still needed to be recontoured, and reseeded and compaction has been scheduled to be completed in spring of 2015 once the ground thaws.

3.5.5 Tree & Shrub Mitigation

It appeared that in general, major woody areas were avoided through Project siting. As required, a count of trees and shrubs was done within the area expected to be impacted by construction (Docket #6, Application – Appendix D Natural Resource Report). The survey documented in (Docket #6, Application – Appendix D Natural Resource Report) found that mitigation was not required for any trees or shrubs due to the lack of presence in 50 ft. ROW.

3.5.6 Noxious Weeds

A survey for noxious weeds was part of the natural resource survey prior to Project construction (Docket #6, Application – Appendix D Natural Resource Report). Noxious weed populations were found but there is no potential for spread since soil disturbing activity is in a very limited area, which did not have noxious weed populations. No noxious weed populations were observed incidentally during the site inspection.



Responsive partner. Exceptional outcomes.

3.6 CONSTRUCTION, RECLAMATION & SOILS

3.6.1 Construction Management & Safety

E3 Environmental was listed in the preconstruction meeting minutes as environmental consultants during construction. Weekly construction reports were emailed to the PSC and Wenck for part of construction. Each report indicated whether any safety or environmental incidents had occurred, and documented that construction of the Project proceeded in accordance with the Application and safety requirements. No major adverse weather occurred during construction. Due to late delivery of valves and gauge parts construction was delayed nearly 3 months. The current reports held by Wenck do not encompass the project in its entirety and the reports have not been filed in the project docket. Wenck recommends that the PSC or Hess file the projects.

3.6.2 Pipeline Depth

Since no new pipeline installation is required for the Project, this provision does not apply. Hess stated the existing pipeline segments to be used for the Project were buried to at least the specified depth.

3.6.3 Erosion & Sedimentation

The Project Applications state BMPs would be used as necessary during and after construction to minimize soil erosion and protect surface water, however ground disturbance is not anticipated other than minor areas at the ends of the route where valves and pumps would be installed. However, one minor concern was that grading, seeding, and compaction still need to be completed this spring. Wenck recommends that this be completed as soon as possible to avoid possible erosion problems.

3.6.4 Soil Segregation & Staging

It appeared from the site visit that soil disturbance was minor and limited to Hess property at the ends of the pipeline route (**Appendix B, Photos 3, 10**).

3.6.5 Graded Roads Bored

Wenck verified that there were no road crossings that needed to be directionally bored.

3.6.6 Reclamation & Roads

Weekly construction reports indicated that cleanup and reclamation had occurred concurrently with construction activities. At the time of the inspection, the pipeline trench had been backfilled, soils still needed to be recontoured, compacted, and reseeded. Wenck recommends that the PSC request documentation from Hess when vegetation has fully established. No temporary roads had been used during construction. All roads within the Project area appeared to be in good condition and properly maintained.

3.6.7 Fencing, Repairs & Waste

Fence lines were not crossed during construction of the Project. Hess reported there had not been any agricultural fields with drainage tile impacted by construction of the Project. There was no waste or debris observed at the site (**Appendix B, Photos 2-6, 10**).

3.6.8 Underground Facilities

No reports of damage to underground facilities were reported to the PSC. Wenck confirmed with Hess that no damage to facilities occurred during construction.



Responsive partner. Exceptional outcome

3.7 OPERATION

3.7.1 Safety & Record-keeping

No concerns were identified during the site review that would indicate that Project operation was out of compliance with the Application or safety regulations. Examples of operational safety measures observed at the site include use of personal protective equipment and warning signs marking the pipeline route. No reports of extraordinary events were filed to date with the PSC.

3.7.2 Maintenance

Hess indicated that the pipeline is regularly inspected and maintained. There was no waste, debris, or abandoned equipment observed during the inspection. The site appeared to be regularly maintained.

3.7.3 Public Contact & Safety

Warning signs marking the location of the pipeline had been installed and were in place at all fence lines and road crossings (**Appendix B, Photos 2-6, 10**).



Responsive partner. Exceptional outcomes.

4.0 Issues to Resolve and Recommendations

4.1 PROJECT SPECIFICATIONS NEEDING WRITTEN VERIFICATION

Several components of the Project were asserted in the Application or proposed construction and could be verified in writing, but have not been filed with the PSC. Table 2-1 summarizes these items, which are indicated as those shaded in the "Written Verification" column, indicating no written verification was provided where applicable and necessary. Wenck does not consider any of these items to be critical for Project compliance. However some were more important than others and Wenck suggests they be on file with the PSC to confirm compliance. Wenck recommends the PSC request from Hess the following list of "Necessary" items, and if the PSC deems appropriate, the list of "Potential" items could also be requested.

Necessary Items

- As-built design specifications and associated GIS or AutoCAD files.
- Weekly Construction Reports for entire construction process. Ensure the reports are filed on the public Project docket.

Potential Items

- Written verification of compliance with ND One-Call Excavation Notice System.
- Written verification of compliance with US DOT 49 CFR Parts 194 and 195.

4.2 SOIL REPLACEMENT & REVEGETATION

There were a couple outstanding issues at the Project site related to reclamation. Hess stated during the inspection that grading, compaction, and seeding will be completed over the pipeline and ROW in the spring 2015 once the ground thaws. Wenck recommends the PSC request monitoring and documentation of these issues.



Responsive partner. Exceptional outcomes.

5.0 Conclusions

Overall, the Project appeared to have been constructed as designed with minimal impacts to the surrounding natural or human environment. The Project site was well-maintained and in good condition. However, Wenck observed several issues that may need to be resolved before the Project is considered complete and in full compliance. This includes: submission of as-built drawings and weekly construction reports, and repair of soils. None of these are critical issues, but the PSC should determine which are necessary for the company to comply with and then notify the company what actions are required on their part.



Responsive partner. Exceptional outcomes.

6.0 References

North Dakota Public Service Commission (ND PSC). 2015. Online Case Search. Available from: http://www.psc.nd.gov/database/company_case_list.php. Accessed March 2015.

Lauf, Ben. 2015. Hess Corporation, LLC. Personal Communication: discussion during site visit.

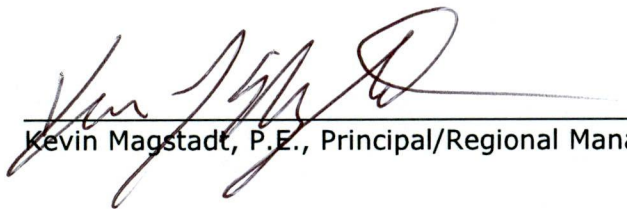


Responsive partner. Exceptional outcomes.

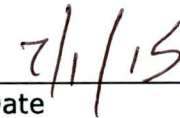
7.0 Signatures

The services performed by Wenck scientists 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.

Lead Project Manager, Kevin Magstadt and Secondary Project Manager, Luke Nelson, prepared the report.



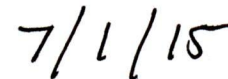
Kevin Magstadt, P.E., Principal/Regional Manager



Date



Luke Nelson, Project Engineer



Date



Responsive partner. Exceptional outcomes.

Maps of Project



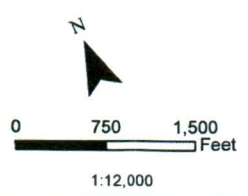
Path: P:\SWCA\RTF-Tie-in Pipeline\map_docs\rtf\RTF_Tie-in Pipeline.mxd

Date: 8/6/2013

Image courtesy of USGS, © 2013 Microsoft Corporation, © 2013 NAVTEQ, © AMB



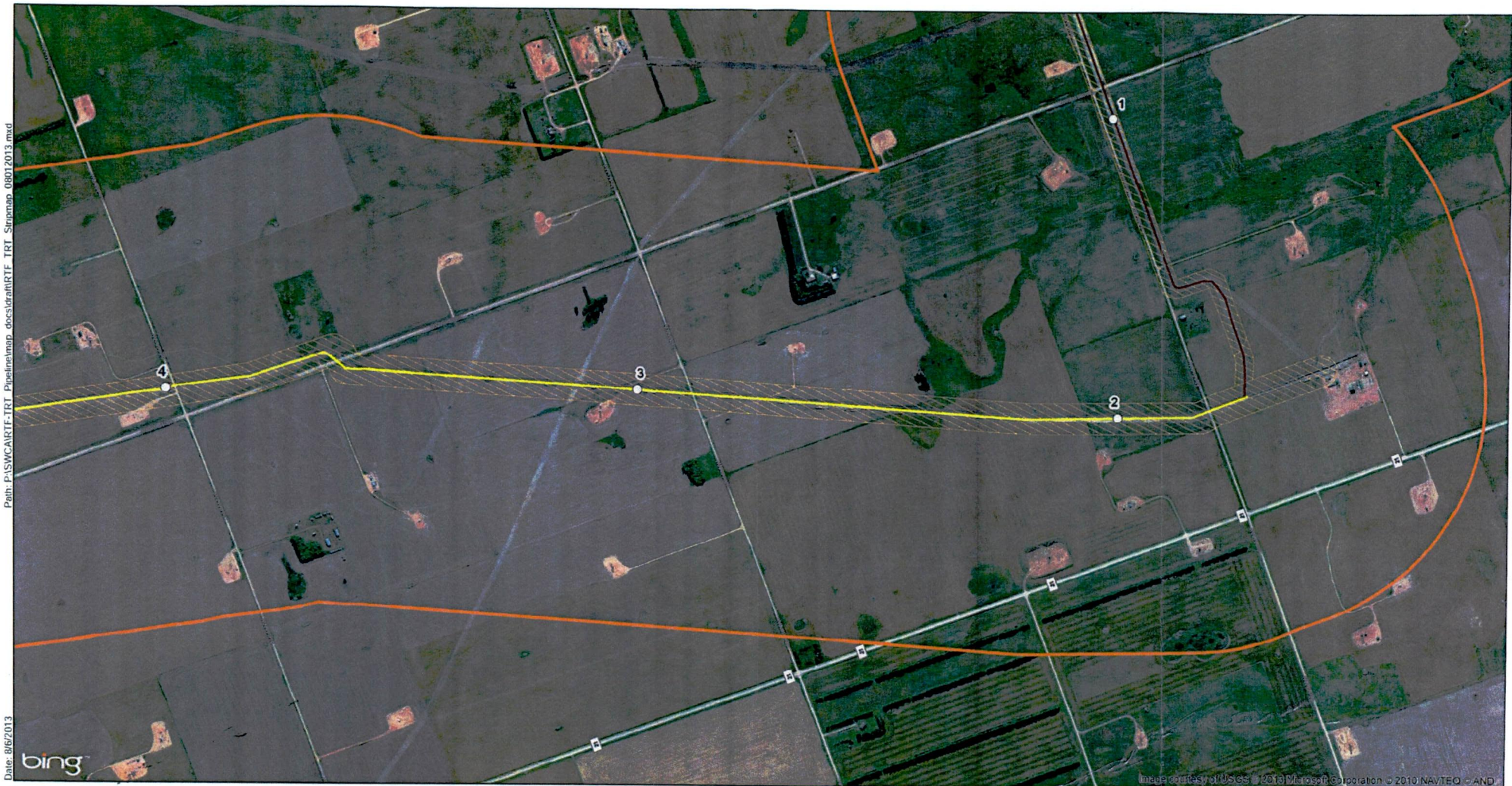
- MilePost
- Hess Facilities
- Segment B
- Segment E
- Segment C
- ▨ Survey Boundary
- ▭ Corridor (1 mile)
- ▨ Federal Land
- ▨ State Land



RTF Tie-in Pipeline Project
 Surveyed Corridor
 Williams County,
 North Dakota

Author: LTD

Source: ESRI Online and USFWS

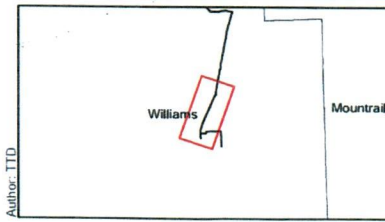


Path: P:\SWCA\RTF-TRT_Pipeline\map_docs\rtf\RTF_TRT_Stripmap_08012013.mxd

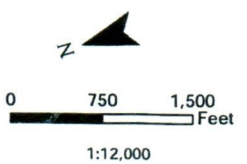
Date: 8/6/2013



Image courtesy of USGS © 2010 Microsoft Corporation © 2010 NAVTEQ © AND



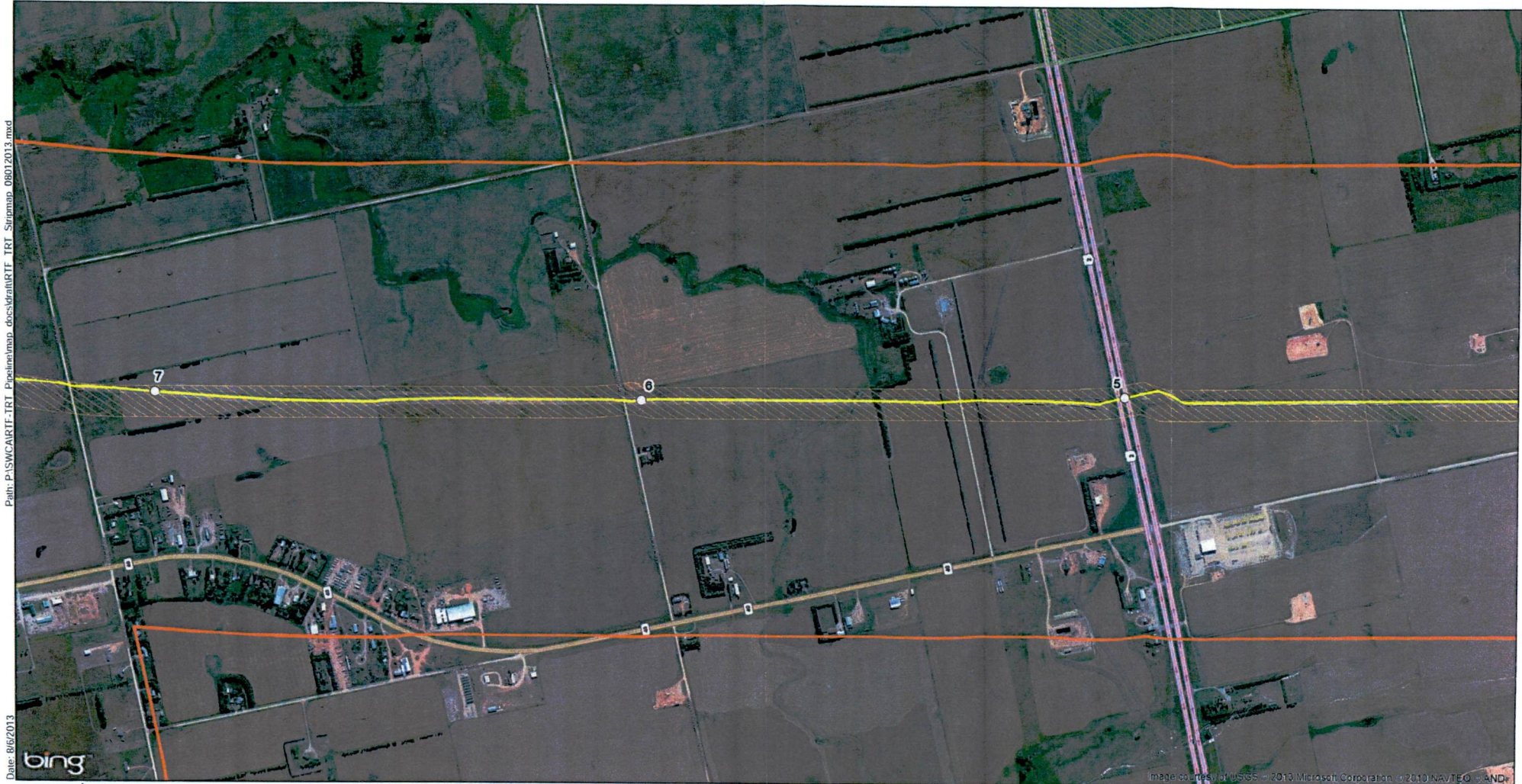
- MilePost
- Hess Facilities
- Segment B
- Segment E
- Segment C
- ▨ Survey Boundary
- ▭ Corridor (1 mile)
- ▭ Federal Land
- ▨ State Land



RTF Tie-in Pipeline Project
 Surveyed Corridor
 Williams County,
 North Dakota

Source: ESRI Online and USFWS

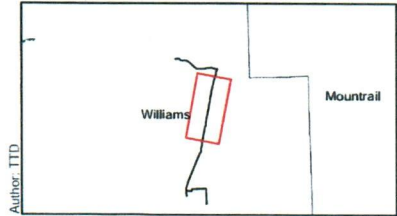
Author: TTD



Path: P:\SWCA\RTF-Tie Pipeline\map_docs\draft\RTF_Tie_Stripmap_08012013.mxd

Date: 8/6/2013

Image courtesy of USGS - 2013 Microsoft Corporation - 2010 NAVTEQ - AND



○ MilePost	▨ Survey Boundary
■ Hess Facilities	▭ Corridor (1 mile)
— Segment B	▭ Federal Land
— Segment E	▨ State Land
— Segment C	

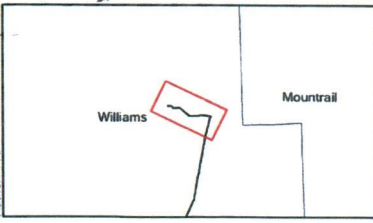
Source: ESRI Online and USFWS

0 750 1,500 Feet

1:12,000


RTF Tie-in Pipeline Project
 Surveyed Corridor
 Williams County,
 North Dakota

Author: ITD





○ MilePost	▨ Survey Boundary
■ Hess Facilities	▭ Corridor (1 mile)
— Segment B	▭ Federal Land
— Segment E	▨ State Land
— Segment C	

Source: ESRI Online and USFWS



0 750 1,500 Feet

1:12,000

RTF Tie-in Pipeline Project
 Surveyed Corridor
 Williams County,
 North Dakota

Photographs



Photo 1. Direction: North. Inside protective container around transition between existing and new pipeline, located directly south of Tioga Rail Terminal.



Photo 2. Direction: East. One of the pipeline markers that outlines transition point from existing to new pipeline running north to south, leading to Tioga Rail Terminal. East to west existing pipeline connecting to Ramberg Truck Facility.



Photo 3. Direction: South. Area where existing pipeline ties into the Tioga Rail Terminal on the north end of the Project. The area still needs to be graded, compacted, and reseeded.



Photo 4. Direction: North. Pipeline running toward Tioga Rail Terminal on the north end of the Project. Additional view of area that still needs to be reclaimed.



Photo 5. Direction: North. Pipeline ROW north toward rail terminal pig launcher on north end of Project. One pipeline ventilation marker is visible in foreground.



Photo 6. Direction: North. Another view of pipeline ROW toward rail terminal pig launcher on north end of Project. An additional pipeline ventilation marker is visible in foreground.



Photo 7. Direction: Northwest. Rail terminal transition area with between TRT and RFT, located on the north end of the project at Tioga Rail Terminal.



Photo 8. Direction: North. Tioga Rail Terminal pig launcher leading into transition area between RFT and TRT.



Photo 9. Direction: West. Ramberg Truck Facility pig launcher leading into transition area between RFT and TRT.



Photo 10. Direction: Southwest. Existing pipeline ROW area running north and south that connects tie in point shown in photo 1 and Tioga Rail Terminal, that still needs grading, compaction, and seeding.

Field Observation Points

Point No.	Y	X	Z
190	46.82779	100.8865	1607
191	48.38862	102.9533	1929
192	48.3913	102.9552	2007
193	48.39327	102.9574	2035
194	48.39399	102.9588	2079
195	48.39396	102.9589	2084
196	48.39394	102.9585	2118
197	48.39391	102.9586	2121