

# Basin Electric Naset to Northshore 230 kV Transmission Line Project

## *As-Built Inspection Report*

**Docket Number: PU-21-049**

Prepared for North Dakota Public Service Commission



September 2023

# As-Built Inspection Report

September 2023

## Contents

1	Executive Summary .....	2
2	Background and Scope .....	3
2.1	Introduction .....	3
2.2	Regulatory Purpose and Need .....	3
2.3	Scope of Work .....	3
3	Findings of Site Inspection.....	4
3.1	Methods .....	4
3.2	On-Site Inspection Observations.....	4
4	Issues to Resolve and Recommendations.....	5
5	Signatures .....	5

## List of Appendices

Appendix A Photo Log and Observation Maps

---

# 1 Executive Summary

The North Dakota Public Service Commission (PSC) retained Barr Engineering Co. (Barr) to complete site inspections for the construction of the Basin Electric Neset to Northshore 230 kV Transmission Line project in Mountrail County, North Dakota, constructed by Basin Electric Power Cooperative (Basin). The purpose of the inspections is to ensure the project is constructed in compliance with siting laws and rules and the applicable PSC Orders for the project.

A pre-construction conference call was held for the Project on 2 September 2021. Barr attended the call and reviewed project documents to become familiar with the Project and PSC Orders for the Project. Construction involving soil disturbance began 13 September 2021. A Topsoil Removal Inspection Report was previously submitted to the PSC.

An as-built inspection was conducted on 21 September 2023. The transmission line route was inspected, and reclamation and seeding were observed to be done according to Natural Resources Conservation Service (NRCS) recommendations. The right of way was clear of waste, and grading had been completed to restore the area affected to as near as practicable to the grade as it existed prior to construction. Overall, project construction appears to be in compliance with the applicable siting laws, rules, and PSC orders.

---

## 2 Background and Scope

### 2.1 Introduction

The Neset to Northshore 230kV Transmission is a 230-kilovolt transmission line originating at the Neset substation near White Earth, North Dakota and ending at the new Northshore substation north of New Town, North Dakota. Refer to project siting application for detailed route information.

The transmission line for the project is designed to carry 230-kilovolt electrical power to the new substation. The Project is under the jurisdiction of the North Dakota PSC, which issued its Findings of Fact, Conclusions of Law, and Order in Case No. PU-20-49 on 23 June 2021, granting Certificates of Corridor Compatibility No. 222, and Route Permit No. 232 for the Project.

### 2.2 Regulatory Purpose and Need

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) charges the Public Service Commission with determining 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. Inspections during construction ensure that such projects are built 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 Orders.

### 2.3 Scope of Work

The North Dakota Public Service Commission retained Barr Engineering Co. to perform as-built inspections of the Project. Barr's scope of work was to complete and document an on-site as-built inspection upon completion of the construction phase of the project to verify the project was constructed in compliance with the siting laws, rules, and applicable Commission Orders and to verify the topsoil was replaced and covered as required in compliance with the Commission's Order. This report contains site visit observations and a summary of findings and issues that should be addressed for the Project to be considered complete and in full compliance.

---

## 3 Findings of Site Inspection

### 3.1 Methods

Andrew Unbehaun, Project Manager/Field Inspector for Barr, visited the Project site on 13 September 2023 to conduct as-built inspections. Nathan Kleyer, Land Representative for Basin, accompanied Barr staff on the visit. Mr. Kleyer represents Basin in discussions and interactions with landowners along the project corridor.

The site was visually inspected by driving to different access points along the right-of-way (ROW), then walking the ROW where construction activities had been conducted by Farden Construction, Inc. (Farden), the contractor constructing the transmission line for Basin. Contractor equipment had been removed from the site prior to the site inspection. Completed grade restoration and seeding was observed. The portion of the project inspected was completed in early 2023 so there was significant growth along the ROW. Digital photographs were taken at observation points at regular intervals along the pipeline route. Geographic coordinates were recorded at observation points using a handheld Global Navigation Satellite System (GLONASS) device (iPhone 11; <5m accuracy; WGS84 datum).

### 3.2 On-Site Inspection Observations

The topsoil replacement and seed placement appeared to be in compliance with NRCS guidelines (See Appendix A).

The contractors appear to have done a satisfactory job replacing subsoil and topsoil, reclaiming, and constructing the project to meet all siting laws, rules, and Commission Orders. BEPC representatives stated they have a strong relationship with the contractor and were involved in ensuring soil was restored and the area was reclaimed properly. Work areas visited during the inspection were free of debris and waste, and fences and gates had been repaired or replaced.

## 4 Issues to Resolve and Recommendations

As-built inspection of the project verified that the project is constructed in compliance with the siting laws, rules, and applicable Commission Orders. No major issues were observed during the as-built inspection. However, Barr makes the following recommendations for post construction monitoring and observance:

Issues	Recommendations
<b>Vegetation regrowth</b>	Ongoing monitoring of native seed mix growth
<b>Additional potential issues</b>	Refer to project Storm Water Pollution Prevention Plan (SWPPP) for additional postconstruction recommendations

## 5 Signatures

The services performed by Barr staff for this project have been conducted in a manner consistent with the technical skill and degree of care exercised by professionals currently practicing in this discipline under similar time and budget constraints. Findings and recommendations represent our professional judgement and are based on available information and accepted practices. No warranty is implied or expressed beyond this.



Andrew Unbehaun, Project Manager

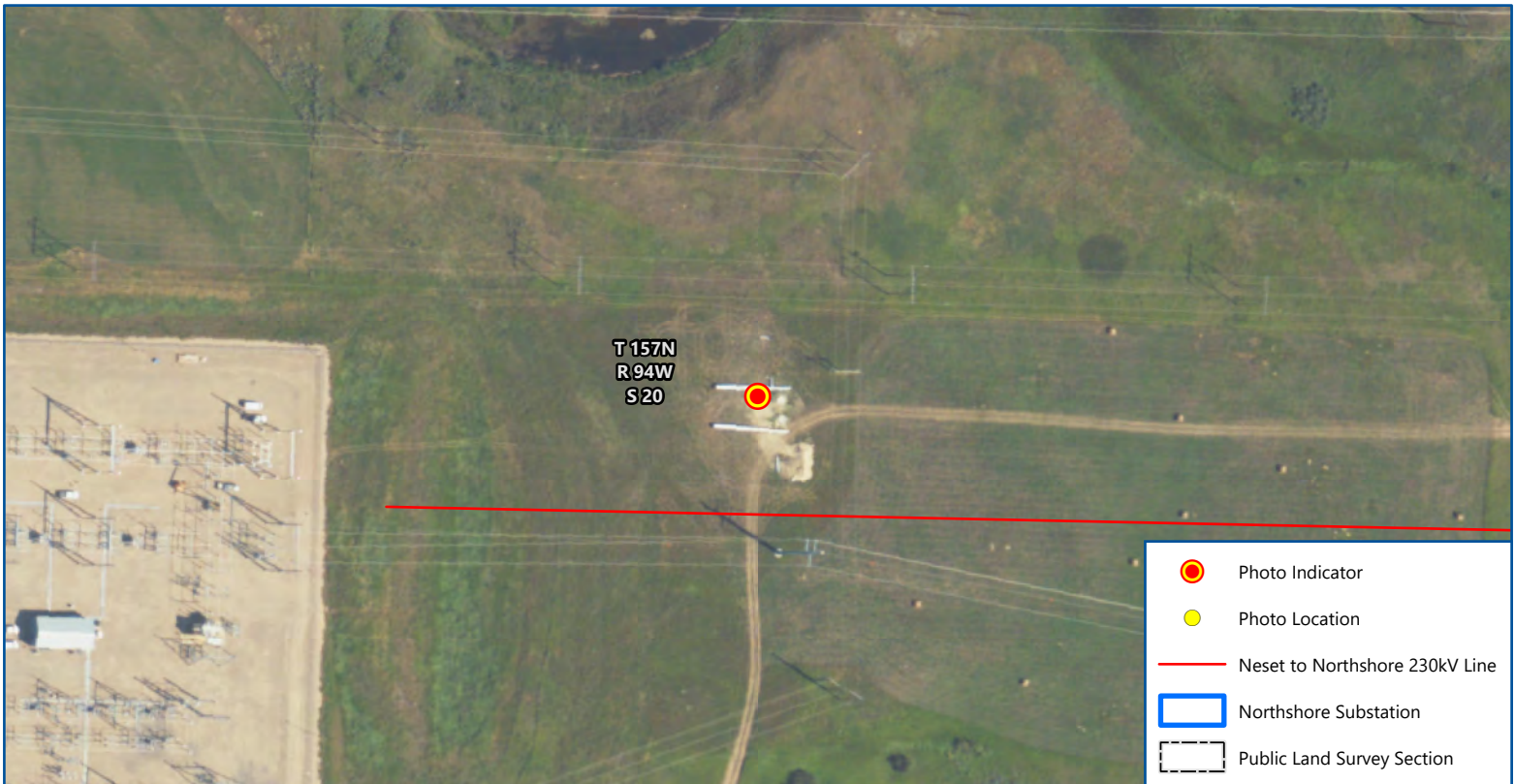
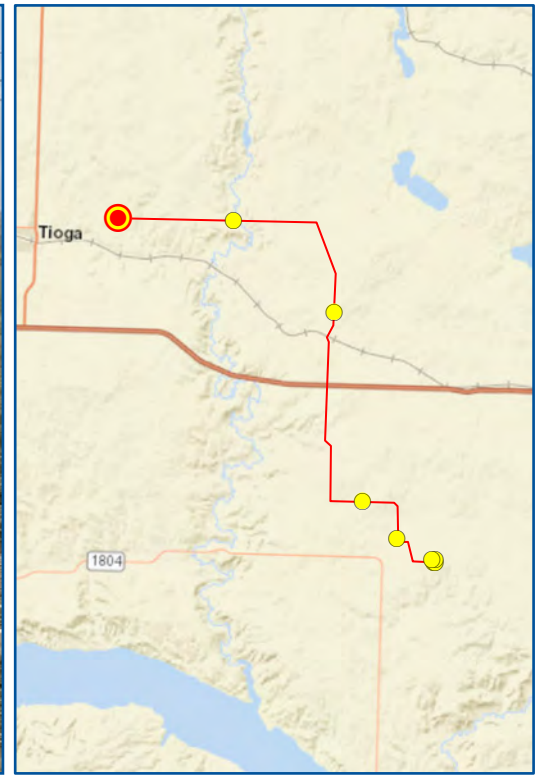
10/06/2023

Date


## Appendices


## Appendix A

### Photo Log and Observation Maps



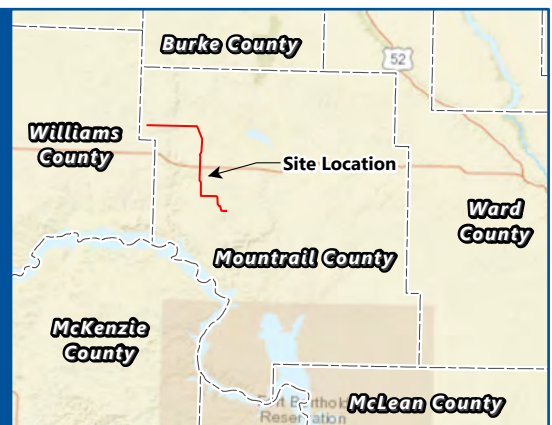
Map 1 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

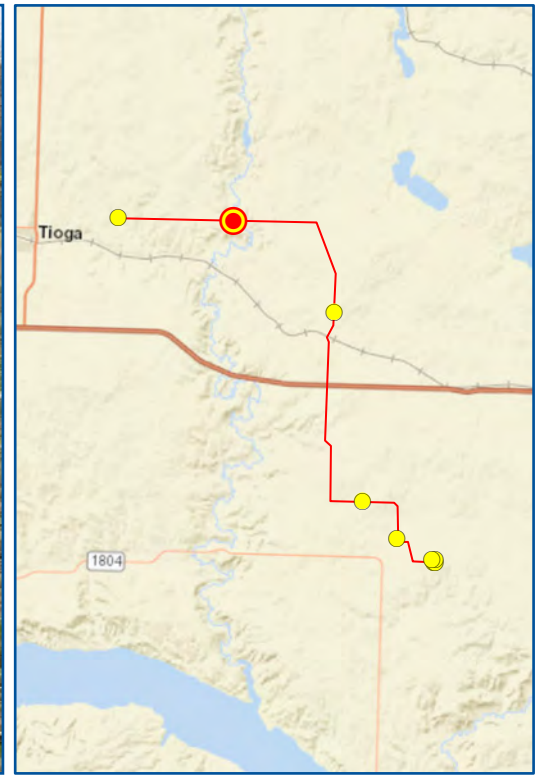






Imagery: USDA NAIP (2022)

Date: 9/21/2023  
 Comment: Final pole location. Photo looking east.  
 Latitude: 48.408451  
 Longitude: -102.856544  
 Coordinates are in the WGS84 datum.

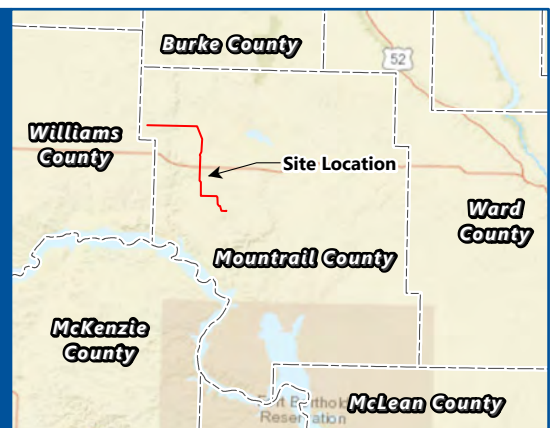


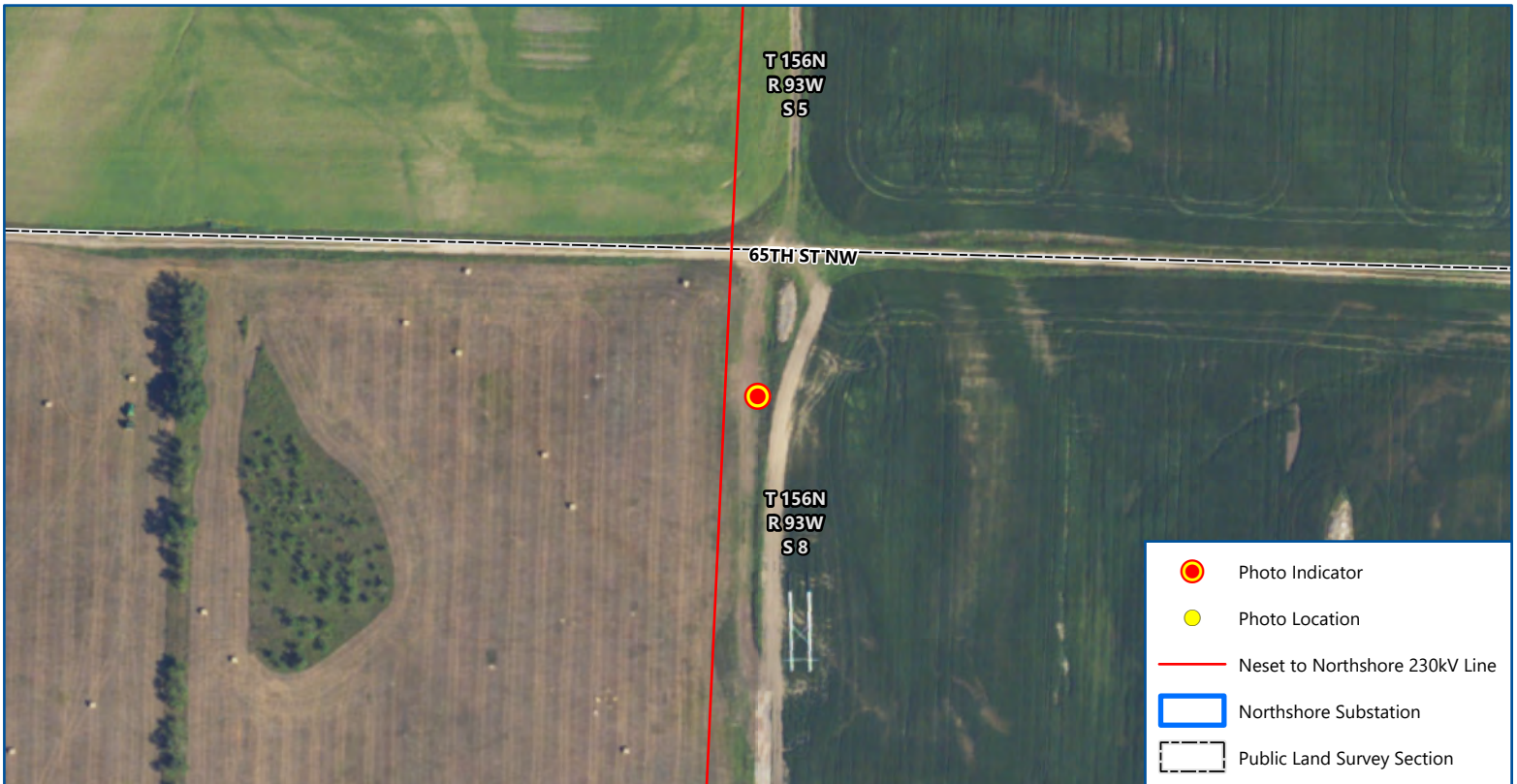
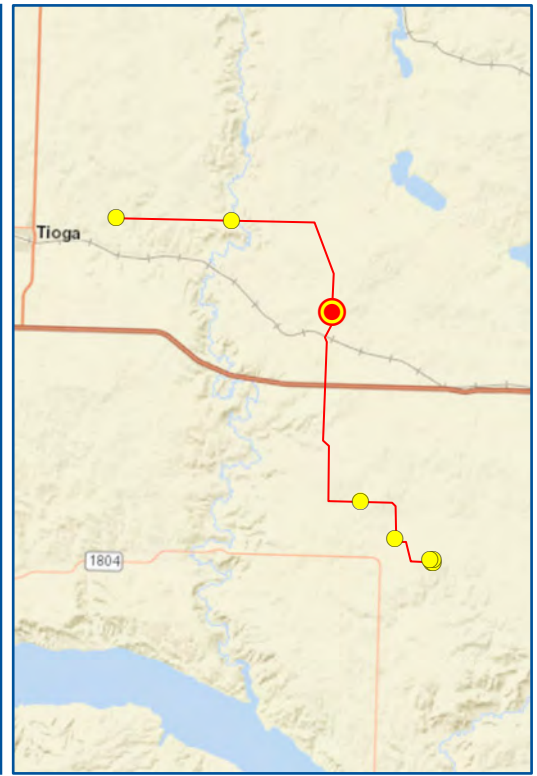


Map 2 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota


  
  
 Imagery: USDA NAIP (2022)

Date: 9/21/2023  
 Comment: Pole base looking west.  
 Latitude: 48.408525  
 Longitude: -102.75362  
 Coordinates are in the WGS84 datum.





Map 3 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

  
 0      200  
 Feet

Imagery: USDA NAIP (2022)

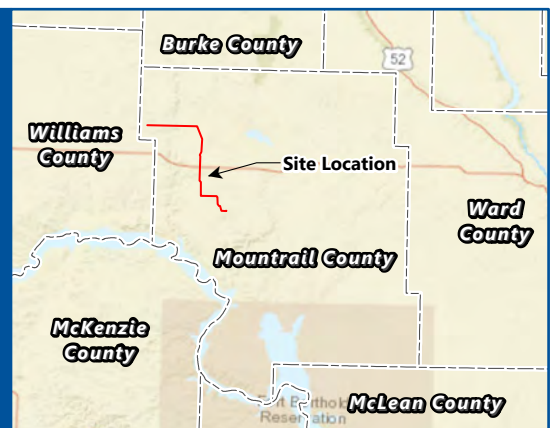
Date: 9/21/2023

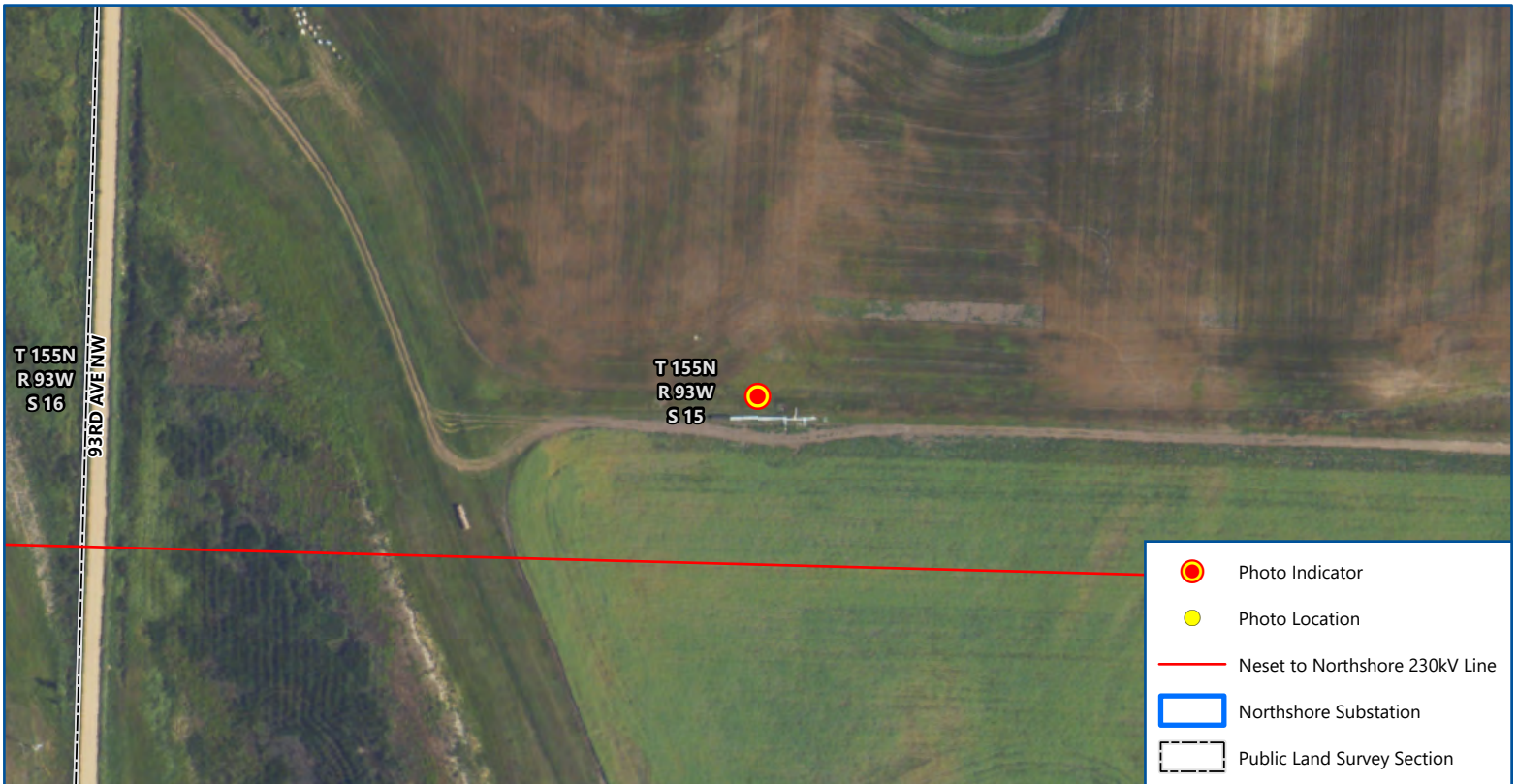
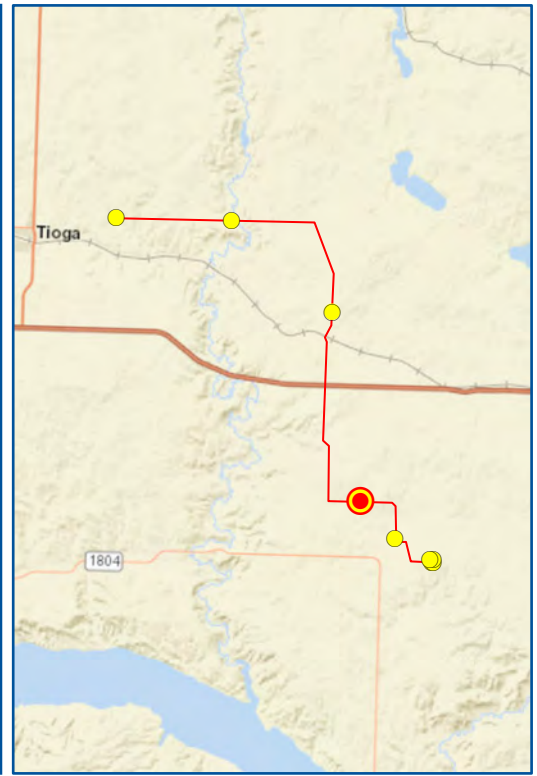
Comment: Temporary staging area used during construction. Topsoil replaced and reseeded.

Latitude: 48.355987


Longitude: -102.661324

Coordinates are in the WGS84 datum.





Map 4 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

  
 0      200  
 Feet

Imagery: USDA NAIP (2022)

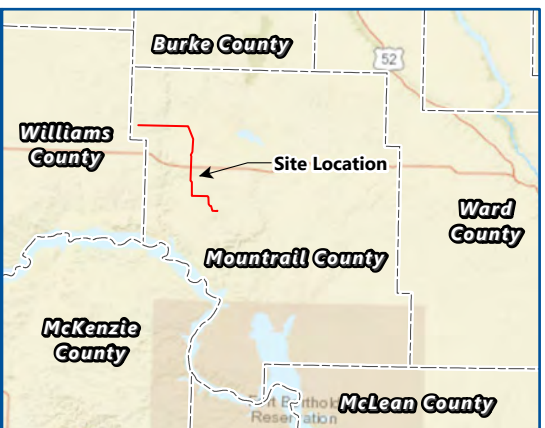
Date: 9/21/2023

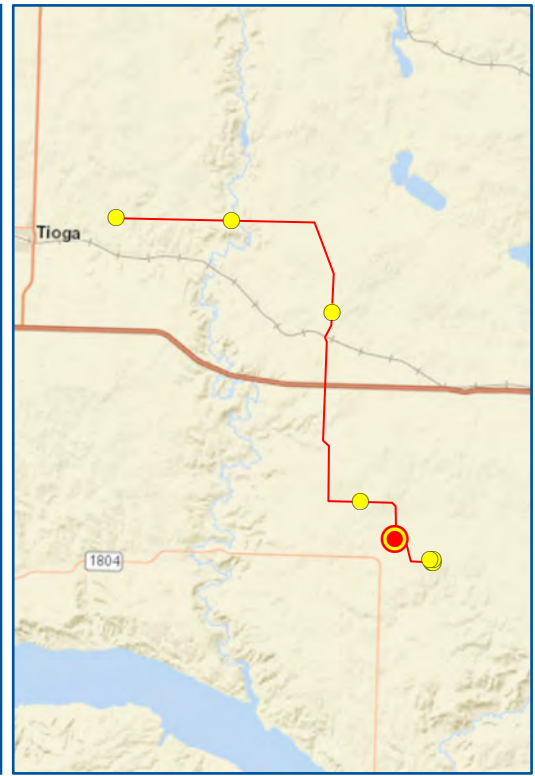
Comment: Looking east along section line/right of way. Topsoil removed and replaced along section line.

Latitude: 48.244092



Longitude: -102.631311

Coordinates are in the WGS84 datum.





Map 5 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

  
  
 Feet

Imagery: USDA NAIP (2022)

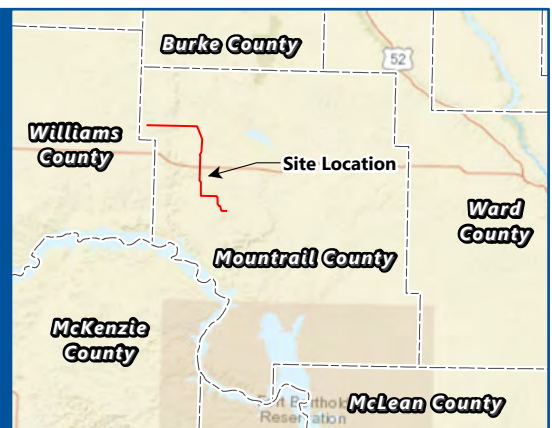
Date: 9/21/2023

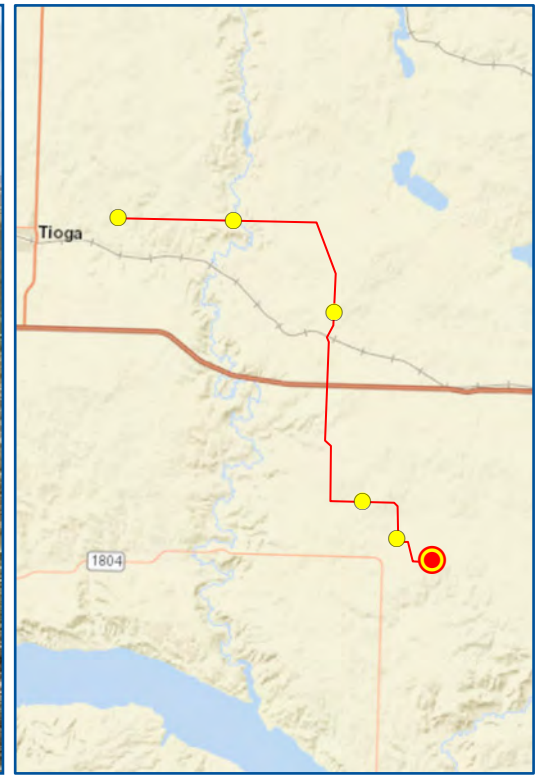
Comment: Edge of disturbed area at pole, looking southeast.

Latitude: 48.222427


Longitude: -102.59985

*Coordinates are in the WGS84 datum.*





Map 6 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

  
 0 200  
 Feet

Imagery: USDA NAIP (2022)

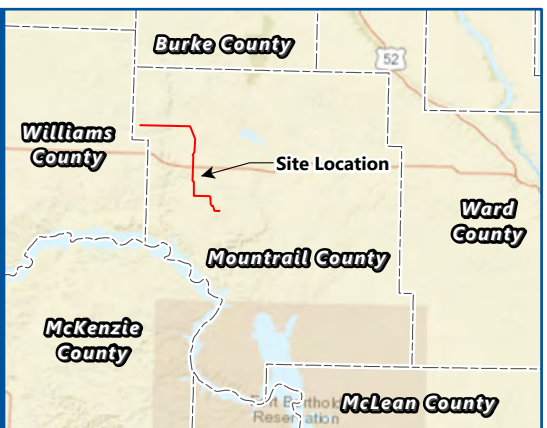
Date: 9/21/2023

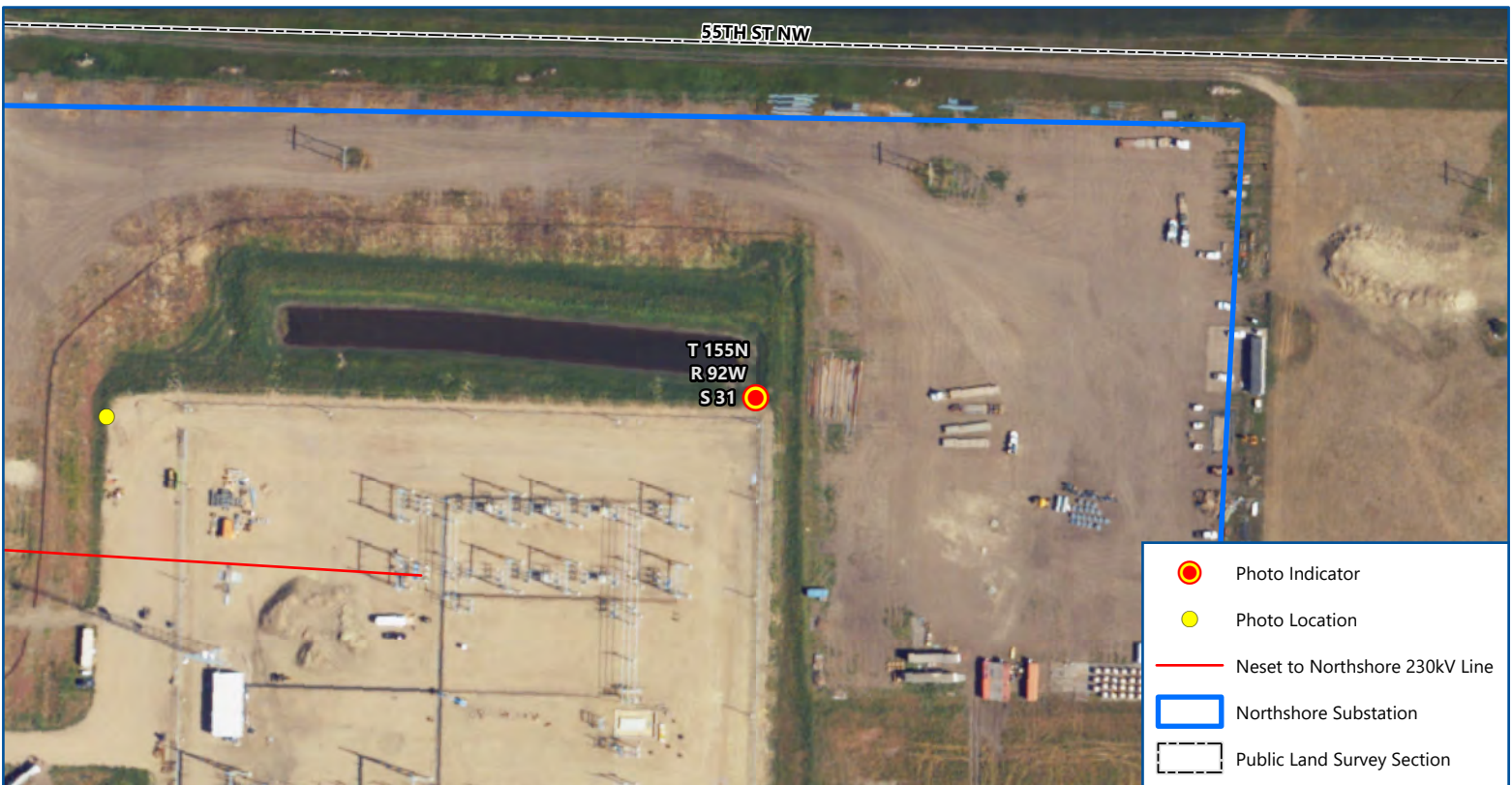
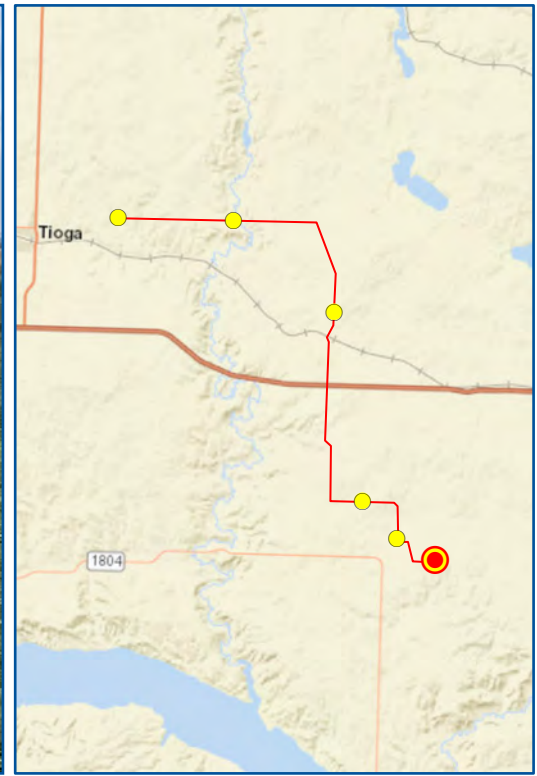
Comment: Northwest corner of substation, looking northwest.

Latitude: 48.210256


Longitude: -102.568137


*Coordinates are in the WGS84 datum.*





Map 7 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota





Imagery: USDA NAIP (2022)

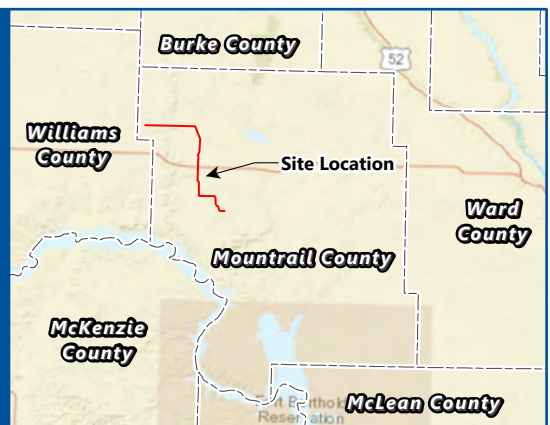
Date: 9/21/2023

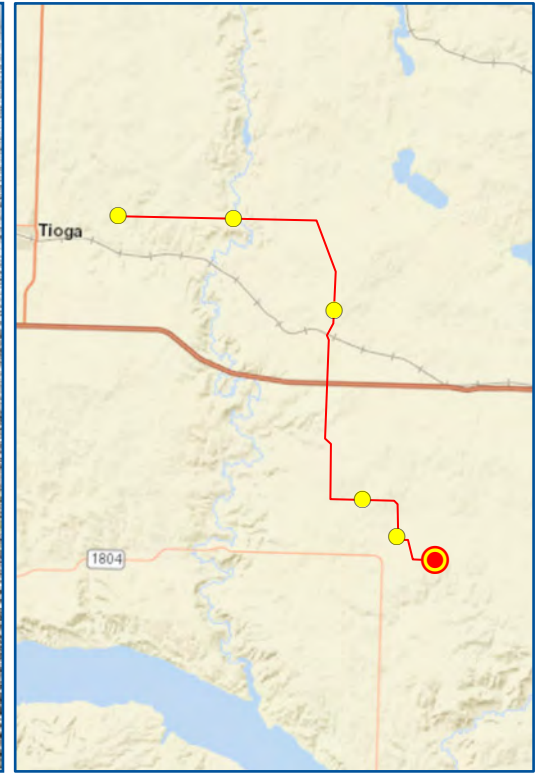
Comment: Drainage pond with topsoil replaced around and through basin.

Latitude: 48.210365



Longitude: -102.565276

*Coordinates are in the WGS84 datum.*





Map 8 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

  
  
 Imagery: USDA NAIP (2022)

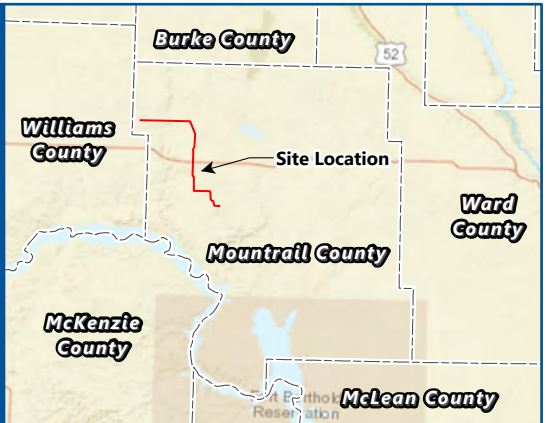
Date: 9/21/2023

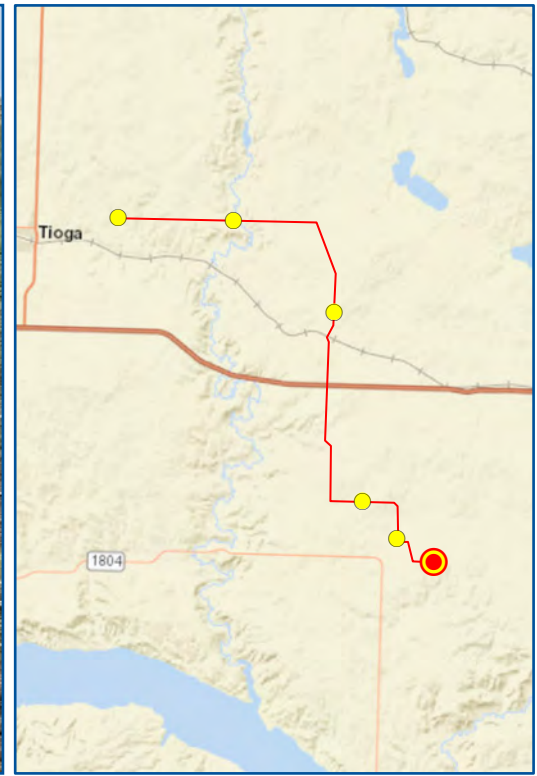
Comment: Southeast corner looking west, topsoil interface with substation boundary

Latitude: 48.208797

Longitude: -102.565231

*Coordinates are in the WGS84 datum.*





Map 9 of 9  
**BASIN ELECTRIC**  
**230KV TRANSMISSION LINE**  
 North Dakota Public Service Commission  
 Mountrail County, North Dakota

N  
  
 Feet

Imagery: USDA NAIP (2022)

Date: 9/21/2023  
 Comment: Looking east, edge of substation meets topsoil.  
 Latitude: 48.208799  
 Longitude: -102.566408  
 Coordinates are in the WGS84 datum.

