PU-18-399

ONEOK Bakken Pipeline, LLC.

Demicks Lake, 20-inch NGL Pipeline

Reclamation Inspection Report

File No. 227701261

September 2021

Prepared for:

North Dakota Public Service Commission
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1.0 EXECUTIVE SUMMARY

The North Dakota Public Service Commission (PSC) retained Stantec Consulting Services Inc (Stantec; Formerly Wenck Associates, Inc) to complete a reclamation and revegetation inspection following the completion of the ONEOK Demicks Lake, 20-inch diameter natural gas liquid (NGL) pipeline project (the Project) in McKenzie County, ND. The purpose of the inspection was to ensure the project was constructed in compliance with the siting laws and rules and the applicable PSC Orders for the Project, which includes requirements for restoration and repair of infrastructure affected by Project construction, reclamation, and reseeding.

The Project was constructed May 2019 through January 2020, with the majority of reclamation activities presumably completed prior to February 2020. However, as of May 2020, it was reported that the restoration contractor (H2 Enterprises) was continuing work to complete soil decompaction and seeding on a remaining 20-miles that were not able to be completed before demobilizing the previous winter.

Stantec completed a revegetation site inspection on 6, 8, and 9 September 2021. This report includes documentation from the site inspection and the status of reclamation and revegetation efforts to date. Overall, Project reclamation was satisfactory, and restoration of the Project appeared to be trending toward pre-construction conditions. The Project right of way (ROW) was observed to be recontoured and reclaimed to the surrounding landscape and topography as near as possible. Erosion was not observed during the September 2021 inspections, but it should be noted that precipitation in 2021 was well below average. The vegetation inspections found weedy species and some unvegetated areas, highlighting locations that may need future monitoring. Cultivated land was producing crops apparently comparable to the outside of ROW cropland, though there were common instances of weeds in the reclaimed farmland. Since the as-built inspection in May 2020, there has been establishment of seeded grasses in rangeland and hay land, but also an increase in weed presence. The growth of seeded grasses was likely lower due to high competition with weed species. Lower grass species growth is likely affected by the drought McKenzie County was experiencing at the time of inspection (NOAA, 2021). If moisture conditions improve, it is anticipated grass establishment should also improve, and overall, restoration of the Project appeared to be trending toward pre-construction conditions.

2.0 BACKGROUND AND SCOPE

2.1 INTRODUCTION

The Demicks Lake 20-inch mixed NGL pipeline project was comprised of three pipeline construction segments and is approximately 77 miles long total. Approximately 74.3 miles of the pipeline resides in North Dakota, and entirely within McKenzie County, and was constructed to transport NGLs, or Y-grade product. The Project originates at ONEOK's Demicks Lake Gas Processing Plant in McKenzie County T151N, R96W, Section 20, travels south and west, and terminates in Township 19N, Range 60E, Section 3 in Richland County, Montana. The portions of the Project within McKenzie County partially resides in the National Forest System-Little Missouri National Grassland. Jomax Construction Company has conducted the pipeline construction of all identified project spreads The Project construction, including ROW reclamation and final ROW clean-up, was understood to be completed in 2020.

The pipe for the Demicks Lake Pipeline is a 20.0-inch outside diameter steel pipe with 0.344-inch wall thickness for line pipe and 0.375-inch for road crossings. The maximum operating pressure will be 1,480 pounds per square inch and the throughput of each pipe will be 40,000 barrels per day. 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-19-85 on 31 May 2019, granting Certificates of Corridor Compatibility No. 209 and Route Permits No. 219 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 PSC Findings of Fact, Conclusions of Law, and Order (Order). The PSC retained Stantec to complete a reclamation and revegetation inspection of the Project following construction completion and as-built inspections.

2.3 METHODS AND SCOPE OF INSPECTION

2.3.1 Project Scope Identification

Stantec's scope of work was to perform and document a reclamation and revegetation inspection after one full growing season no less than one year from the anniversary date of completion of fertilization and seeding. The reclamation and revegetation inspection includes a follow-up of areas of concern identified in the as-built construction inspection. The report includes, but is not limited to, documentation of site visit

observations, and a summary of findings and issues that should be addressed for the Project to be considered complete and in compliance.

Stantec's intent was to ensure the Projects obligations of compliance with reclamation and restoration specifications found in the Findings of Fact, Conclusions of Law and Order, and Certifications Relating to Order Provisions. These "Project Specifications" are listed in Table 1. Project Specifications originated mainly from the Certification Relating to Order Provisions.

Table 1. Project Specification Scope Table

Order Provision 18	*Company understands and agrees that it shall, as soon as practicable upon the completion of the construction of the transmission facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.*
Order Provision 19	*Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the transmission facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.*
Order Provision 20	*Company understands and agrees that reclamation, fertilization, and reseeding is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.*
Order Provision 21	*Company will fulfill its obligation for reclamation and maintenance of the approved transmission facility right-of-way, transmission facility, and associated facilities continuing throughout the life of the transmission facility.*
Order Provision 22	*Company will repair all fences and gates removed or damaged during all phases of construction and operation of the transmission facility.*
Order Provision 23	*Company will repair or replace all drainage tile broken or damaged as a result of construction and operation of the transmission facility.*
Order Provision 24	*Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.*
Order Provision 25	*Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.*

2.3.2 On-Site Inspection

Scott Krych, Stantec Senior Ecologist, and Zachary Bartsch, Stantec Natural Resource and Soil Scientist, inspected the Project route on 6 September 2021, and 9 September 2021, respectively. The site was inspected by driving to public ROW access points and systematically inspecting ditches, fence lines, the

encompassing ROW, and walking the ROW where accessible. Observation points containing geographic coordinates describing potential issues and reclamation/revegetation status were recorded using ESRI ArcGIS Collector and Survey123 software applications on a tablet utilizing internal satellite triangulation software or paired with a Trimble Global Positioning System (GPS) **(Appendix A)**. Digital photographs were taken with the tablet utilizing the Survey123 application to geotag photo locations and associate all collected data from each Observation Point (Figures 1-20). Photographs were taken showing representative portions of the route, aboveground Project infrastructure, and problem areas (**Appendix B**).

3.0 RESULTS OF SITE INSPECTION

The following subsections outline findings from the inspection pertaining to the land uses of the ROW.

3.1 CROPLAND

The Project ROW crosses several parcels of cropland under small-grain cultivation. Most of the encountered fields were harvested at the time of the inspection. No visual grain yield estimate or stand height comparisons were made, however, the stand density and color of harvested grains within the ROW were generally consistent with the surrounding, undisturbed crops (**Appendix B; Observation Points 9060001, 9090001, 9090002, 9090003, 9090007, 9090011, 9090013, 9090014, 9090018, 9090021, 9090035, 9090046, 9090047, 9090048, and 9090049**). The most evident issue pertaining to the revegetation and reclamation of the cropped ROW appears to be the presence of weed species.

The soil in most of the inspected cropland, including observed horizonal directional drilling (HDD) locations, appeared to have been adequately reclaimed and was matching existing topography. Two minor instances of inadequately replaced and/or mixed topsoil resulted in bare or sparely vegetated subsoil at the surface (**Observation Points 9090011 and 9090049**). Additionally, **Observation Point 9090047** noted natural saline soil which occurs at a point identified from the As-Built Inspection, and was addressed by ONEOK (PU-18-399 Docket 136). The salinity and resulting lack of vegetation seemed to be extending into cropland outside of the ROW, potentially encompassing a larger area of saline effected soil than historically present prior to construction. Current Project ROW land use at **Observation Point 9090002** was observed to be hay land, while historic aerial imagery showed annual row-crop production. It is assumed this land use change was performed on behalf of the landowner, as opposed to activity done by ONEOK. Lastly, the Project ROW crossed one section of farmland which seemed to be historic grassland converted to small grain production only in the ROW. It is assumed that this land use change was performed by the landowner, as opposed to an activity done by ONEOK (**Observation Point 9090003**).

Populations of annual weeds, predominantly kochia (*Bassia scoparia*), were common in the surrounding agricultural fields, but were significantly more concentrated inside of the ROW than outside. This is common in reclamations following soil disturbances but may warrant additional weed control. **Observation Points 9090002, 9090003, 9090007, 9090011, 9090014, and 9090035** also contained grass species inside cropped portions of the ROW such as crested wheatgrass (Agropyron cristatum) and green foxtail (*Setaria viridis*), but these species were found outside of the ROW as well. Crop observed at **Observation Points 9090035** was hayed in 2021, potentially a result of persistent drought conditions.

3.2 HAY LAND

The Project ROW crosses numerous parcels of idle land presumably used for hay production, covered by perennial and annual vegetation. It is presumed these hay lands are not normally subjected to livestock

grazing or cultivation (**Appendix B; Observation Points 9090002, 9090010, 9090012, 9090016, 9090019, 9090020, 9090022, 9090023, 9090024, 9090025, 9090026, 9090027, 9090030, 9090031, 9090032, 9090037, 9090040, 9090042**). According to ONEOK's Revegetation Plan (PU-18-399 Docket 67), the hay land areas were seeding with numerous perennial grasses including, but not limited to, slender wheatgrass (*Elymus trachycaulus*), western wheatgrass (*Pascopyrum smithii*), inland saltgrass (*Distichlis spicata*), and little bluestem (*Schizachyrium scoparium*), which are consistent with NRCS recommendations. However, seed tags were not made available to verify actual seeded species, and any deviations from NRCS recommendations, typically at landowner requests, is unknown.

On-site inspections confirmed the establishment and/or presence of volunteer oats (*Avena* sativa), seemingly from 2020 cover crop planting, pearl millet (*Panicum miliaceum*) for hay, as well as various seeded grasses too small to adequately identify (**Appendix B; Observation Points 9090019, 9090022, 9090023, 9090030, 9090031, and 9090037**). It is assumed the observed seeded grasses are desired species. Other species identified in the Project ROW were alfalfa (*Medicago sativa)*, crested wheatgrass (*Agropyron cristatum*), smooth brome (*Bromus* inermus), cattails (*Typha sp.*), and yellow sweet clover (*Melilotus officinalis*). These species were commonly found near the ROW and are likely recolonizing the disturbed area. However, due to alfalfa's prevalence outside of the ROW and desirable forage quality, alfalfa may have been seeded at the landowner's request. Overall, vegetation cover was >50% in most ROW areas both at the geographical coordinates of the photo observation, and from adjacent visual assessments along ROW extents. It was also evident that the ROW had been either mowed, or successfully hayed at some point in the 2021 growing season.

Annual weeds were also identified in the hayed ROW including Kochia (**Observation Points 9090002, 9090011, 9090012, 9090019, 9090023, and 9090024**), prickly Russian thistle (*Kali tragus*; **Observation Points 9090002 and 9090023**), and lambsquarter (**Observation Points 9090026 and 9090031*).*** **Observation Point 9090002** is included here as well due to the present hay land use. Kochia was the most dominant annual weed observed in hay lands, followed by prickly Russian thistle. It is important to note that observed weeds are likely abundant throughout the ROW, and not just at the listed observation points. Kochia colonies were more concentrated inside the ROW than outside. Prickly Russian thistle was also highly concentrated inside of the ROW, with little to none observed outside of the ROW. Lastly, Canada thistle (Cirsium arvense), a ND and McKenzie County noxious weed, was observed at **Observation Point 9090012**.

3.3 RANGELAND

The Project ROW crosses grassland presumably used as rangeland for grazing or CRP, and displayed no evidence of haying (**Appendix B; Observation Points 9060001, 9060002, 9060003, 9060004, 9060005, 9060006, 9090004, 9090005, 9090006, 9090008, 9090009, 9090015, 9090016, 9090017, 9090029, 9090033, 9090034, 9090036, 9090038, 9090039, 9090040, 9090041, 9090043, 9090044, and 9090045**). According to ONEOK's Revegetation Plan (PU-18-399 Docket 67), the species that were likely planted on rangeland parcels were the native western wheatgrass, green needlegrass, and slender wheatgrass, which are consistent with NRCS recommendations. However, seed tags were not reviewed, and any deviations from NRCS recommendations, typically at landowner requests, is unknown.

On-site inspections confirmed the establishment and/or presence of native species buffalo grass (*Bouteloua dactyloides*), curly-cup gumweed (*Grindelia squarrosa*), gray thistle (*Cirsium undulatum*), hairy golden aster (*Heterotheca villosa*), and western wheatgrass (*Pascopyrum smithii*). The listed grasses were likely seeded in 2020/2021, and demonstrates progress towards successful revegetation of the ROW. Native broadleaf species in the ROW may have been seeded but there is no documentation of landowner requests. Therefore, the native broadleaves are likely recolonizing the disturbed area. Overall, the revegetation of native species matched areas outside the ROW, especially at **Observation Points 9090041, 9090042, 9080045.** Non-native plant species observed in rangeland ROW's were alfalfa, yellow sweet clover, and smooth brome. Smooth brome, alfalfa, and sweet clover were all common outside of the ROW but were at times more persistent inside the ROW. Seeded vegetation cover in the ROW should improve in subsequent growing seasons due to the continued establishment of seeded perennial species, and due to the probability of the severe drought in McKenzie County subsiding over time.

A primary concern regarding restoration of rangelands to preexisting conditions was the presence of weedy species. Kochia was observed as a dominant species within the ROW at **Observation Points 9090008, 9090009, 9090029, 9090033, 9090036, and 9090038**; prickly Russian thistle was identified co-dominating with kochia at **Observation Points 9090033 and 9090038**. Additional, minor weeds, such as curly dock (Rumex crispus), foxtail barley (*Hordeum jubatum*), and lambsquarter were also observed in reclaimed rangeland ROW parcels. Canada thistle was also observed at **Observation Point 9090017**. There is not a significant noxious weed invasion at this location. Timely mechanical or chemical control is recommended for the next growing seasons followed by additional monitoring.

Inspections along rangeland ROW also revealed a few potential issues likely related to soil reclamation. Topsoil with an accumulation of salts was observed at **Observation Points 9090004, 9090006, 9090036, and 9090045**, and revegetation success was variable in terms of species diversity and density. There was no evidence of seeded saline ecosite species outlined in ONEOK's Revegetation Plan (PU-18-399 Docket 67). The saline areas at **Points 9090004 and 9090006** contained sparse weedy cover, and did not contain similar species to surrounding areas. Kochia was common around **Observation Points 9090004, 9090006, and 9090036**, while **9090045** was well vegetated despite sodic patches. It is likely these areas contained naturally occurring salt-affected soils, making revegetation a challenge. However, the establishment of saline tolerant species at these locations would be expected to achieve practical restored conditions, as existed prior to construction.

3.4 NOXIOUS AND ANNUAL WEEDS

Canada thistle was the only noxious weeds observed in the Project ROW, observed at **Observation Points 9080012 and 9080017** (**Appendix B**). A complete list of identified vegetative species is compiled in Table 2 below.

Table 2. Species[1] Observed in Reclaimed ROW

Land Use	Vegetative Class					
	Grasses		Forbs		Weeds/Other	
	Native	Non-Native	Native	Non-Native	Native	Non-Native
Cropland	*NA*	*Oat cover crop* *Green foxtail* *Wheat*	*NA*	*NA*	*NA*	*Kochia* *Prickly Russian thistle*
Hay Land	*Pearl millet*	*Crested wheatgrass* *Smooth brome* *Volunteer Oats*	*NA*	*Alfalfa* *Yellow sweet clover*	*NA*	***Canada thistle*** *Prickly Russian thistle* *Kochia* *Lambsquarter*
Rangeland	*Western wheatgrass* *Buffalograss*	*Crested wheatgrass* *Smooth brome* *Foxtail barley*	*Gray thistle* *Hairy golden aster*	*Alfalfa* *Yellow sweet clover*	*Curly-cup gumweed*	***Canada thistle*** *Kochia* *Prickly Russian thistle* *Lambsquarter* *Curly dock*

[1]Noxious weeds in bold red.

3.5 STREAM/WETLAND CROSSINGS

Three open cut drainages/wetland crossings were examined (**Observation Points 9090017, 9090036, 9090047**). The final topography and vegetative cover matched the area outside of the ROW, except two drainages where salinity issues were occurring (**Observation Points 9090036 and 9090047**). Point 9090047, or As-Built Point 45, was address by ONEOK according to PU-18-399 Docket 136 with topsoil replacement and seeding. This may be a historic saline area, but vegetation cover should be addressed in the areas to prevent salts from spreading into adjacent farmland. One other stream/wetland crossing was observed where the HDD crossing method was used (**Observation Point 9080028**). The boring area

was observed to be appropriately reclaimed and contained adequate vegetative cover (**Observation Points 9090027 and 9090029**).

3.6 ROADS AND MAINTENANCE

Gravel roads crossed by the ROW had been bored underneath to avoid cuts and were in good condition. Most access points through roadside ditches and approaches were reclaimed with adequate vegetation cover. The access at **Observation Point 9090022** appeared to be containing compaction and poor vegetation establishment. While there was no visible gravel or scoria fill left over, the access footprint was clearly visible at this location.

All fences and fenceposts appeared to have been fixed and/or replaced, and no access roads were found to remain. Overall, the ROW was maintained in good condition. No trash or equipment was observed. Above ground Project infrastructure (i.e., valve sites) observed by Stantec were fenced, secure, and maintained well.

3.7 AS-BUILT INSPECTION CONCERNS

As of June 2020, the as-built inspection found several permits and other required documentation had yet to be filed with the PSC. Since the submittal of the as-built inspection report, Stantec found ONEOK has responded to all requests for information from the PSC.

A review of the case file dockets relating to Tree and Shrub mitigation reveals ONEOK plans to sponsor a specific replanting project through the North Dakota Petroleum Foundation's (NDPF) "Plantings For The Future Program" for the tree and shrub mitigation and reporting requirement. ONEOK will also provide the landowners that were affected by tree and shrub removal the option to have the same 2:1 ratio plantings replaced on their properties. The NDPF will conduct a post-planting survey to determine survival rates and results of this inspection will be provided to the Commission. Two years after replanting occurs, ONEOK will file a summary documenting how this Plan achieved sustainable plantings.

As previously mentioned, re-seeding activities are presumed to have been done according to NRCS recommendations, however, it is unknown if any deviations were made upon the request of landowners and Stantec is unaware of any PSC approvals to do so.

4.0 ISSUES, RESULTIONS, AND RECOMMENDATIONS

4.1 VEGETATION MONITORING

Seeded and desired grass species did not comprise a majority of absolute cover in most of the inspected ROW areas. However, native species can be slow to colonize recently disturbed land since competition for available nutrients in the reclaimed soil with annual weed species is high. Another source for delay in native species establishment may be due to drought in McKenzie County, as seeds can lay dormant for significant amounts of time in dry conditions. Despite the lack of precipitation in the 2021 growing season, there was a small, yet positive, presence of desired species. Future monitoring could be conducted to ascertain if absolute cover of desired species increases over time. Stantec recommends, if absolute cover does not increase during a climatically normal season in the next year or two, reseeding may be necessary.

4.2 WEED MANAGEMENT

Weed management is required throughout the majority of the ROW and the weed management plan should be implemented. Stantec recommends coordinating herbicide treatment with landowners for areas within cropland in the Spring of 2022. Kochia is recommended to be sprayed once in the spring when the plants emerge, and later in the summer when late-germinating plants begin emerging (NDSU Extension Service, 2016). Kochia and prickly Russian thistle have seed viability of ~1 year, so adequate control for one growing season may significantly reduce weed presence in following years. Additionally, some herbicides can control both weed species, for example fluroxypyr. Other annual weeds should be monitored along the route in hay lands and rangelands per landowner preferences. Stantec recommends one or two years of mowing or herbicide application in June or July prior to seed ripening. This would reduce the annual weed seed bank within a year or two and allow desired grass to better establish.

The only noxious weed species observed was Canada thistle (perennial). Stantec recommends PSC contact ONEOK about addressing noxious weeds in the ROW. For Canada thistle control, Stantec recommends infested areas be treated immediately at the beginning of the 2022 growing season. Canada thistle is best controlled by repeated mowing to prevent plants from producing seeds, or by applying correct herbicides at the "rosette" vegetative stage, when the herbicide has the greatest chance at killing the plant (Lym, 2013). The locations observed with noxious weeds should be monitored for at least two years to allow for the lifecycle of weeds, and to ensure infestations do not spread.

4.3 SOILS, ACCESS ROAD AND SALINE AREAS

The access road at **Observation Point 9090022** was observed to lack seeded vegetation. Stantec could not determine if topsoil was properly replaced at this location and Stantec recommends the PSC inquire about this area with ONEOK. Adding topsoil or soil biological amendments could be possible methods to improve the organic matter content and improve vegetative restoration here.

There were two saline areas described and identified in this report that contained little to no vegetation, and had a visible accumulation of salts at the surface, which hinders the ability of vegetation to grow due to osmotic stress (**Observation Points 9090004 and 9090006**). Stantec recommends the PSC inquire about these areas with ONEOK. Based on site investigations, these natural saline areas result from landscape positions along drainages, so topsoil replacement will likely not adequately resolve salt accumulation at the surface. Therefore, further reseeding with salt tolerant species to lower the water table is recommended, possibly supplemented with the and application of a sodium amendment (NDSU Extension Service, 2014).

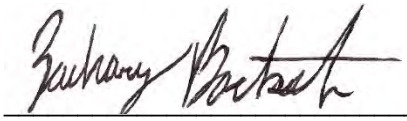
5.0 SIGNATURES

This document was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of North Dakota Public Service Commission (the "Client"). The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The findings in the document are based on conditions and information existing at the time the document was compiled and do not take into account any subsequent changes. Recommendations and opinions 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 and Environmental Scientist, Matt Retka, and Natural Resources Scientist, Zachary Bartsch, prepared the report.

Matt Retka
Project Manager
Environmental Scientist

September 23, 2021
Date



Zachary Bartsch
Natural Resources Scientist

September 23, 2021
Date

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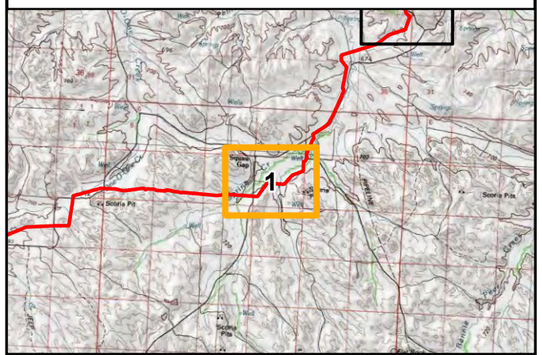
FIGURES

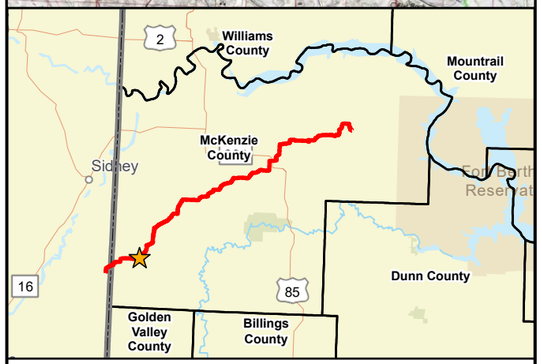
Figure 1-20: Reclamation/Revegetation Observation Locations Map

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 1

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)





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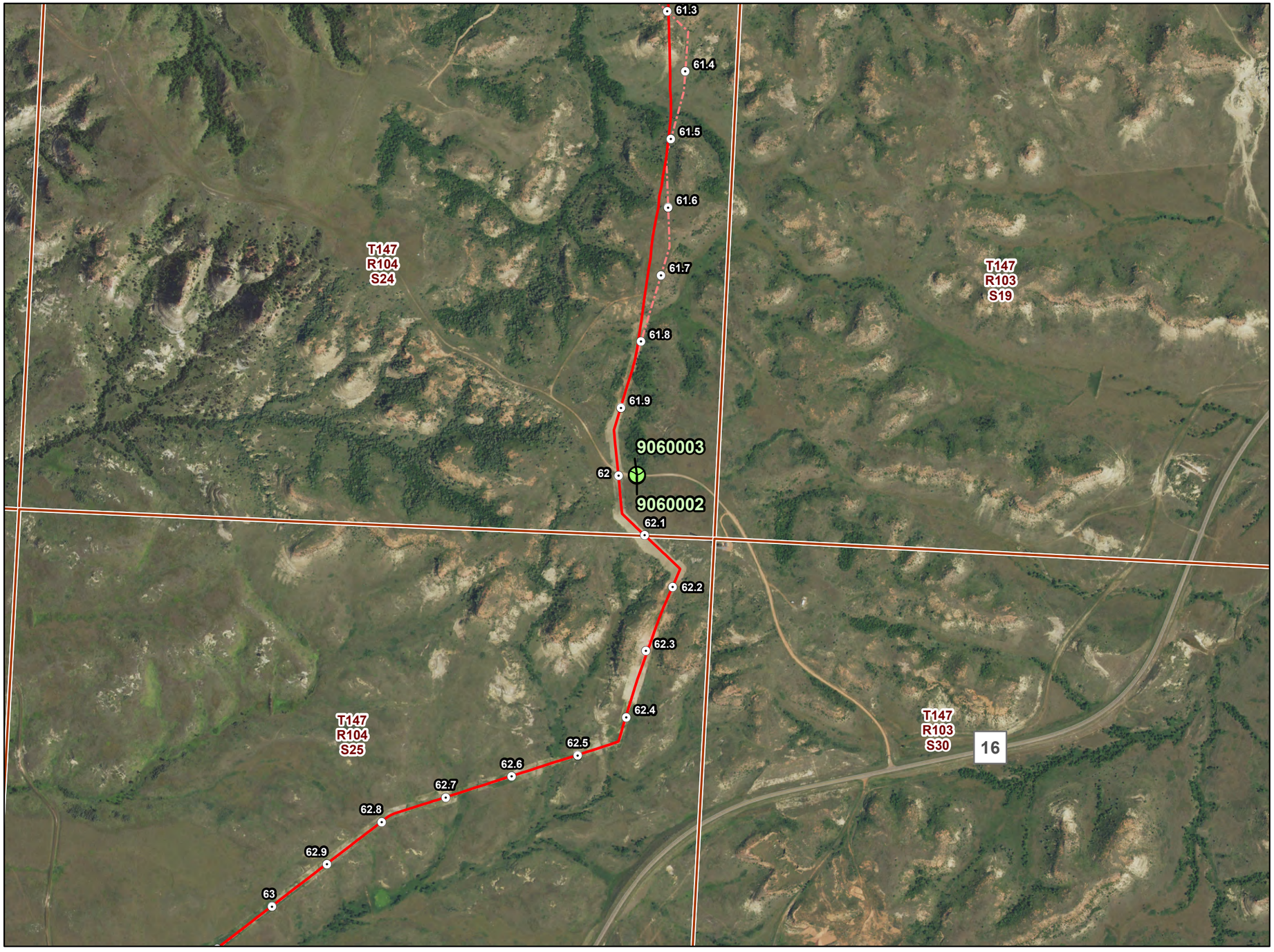
PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

Map 1 of 20



North Dakota Public Service Commission

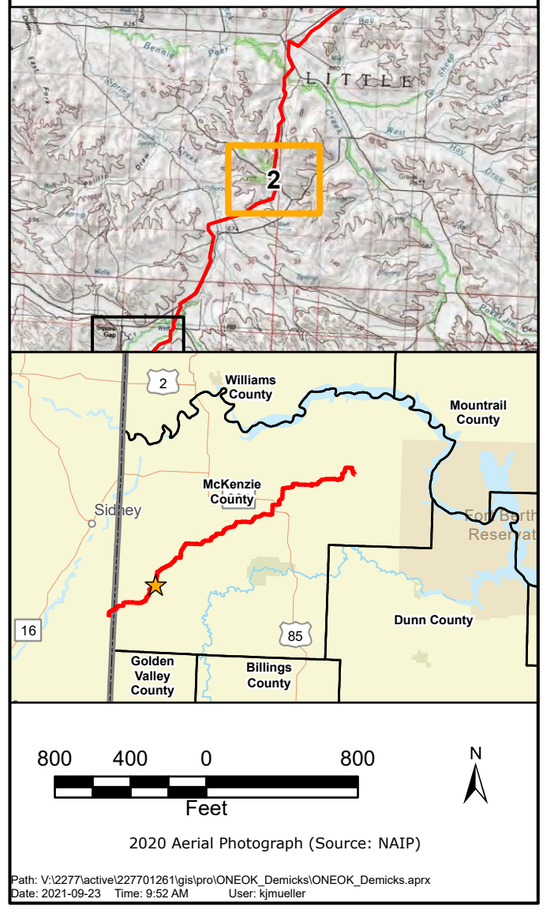
Demicks Lake Pipeline Figure 2

Reclamation/Revegetation Observation Point Location

Milepost

Demicks Lake As-Built Centerline (PU-18-399)

Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

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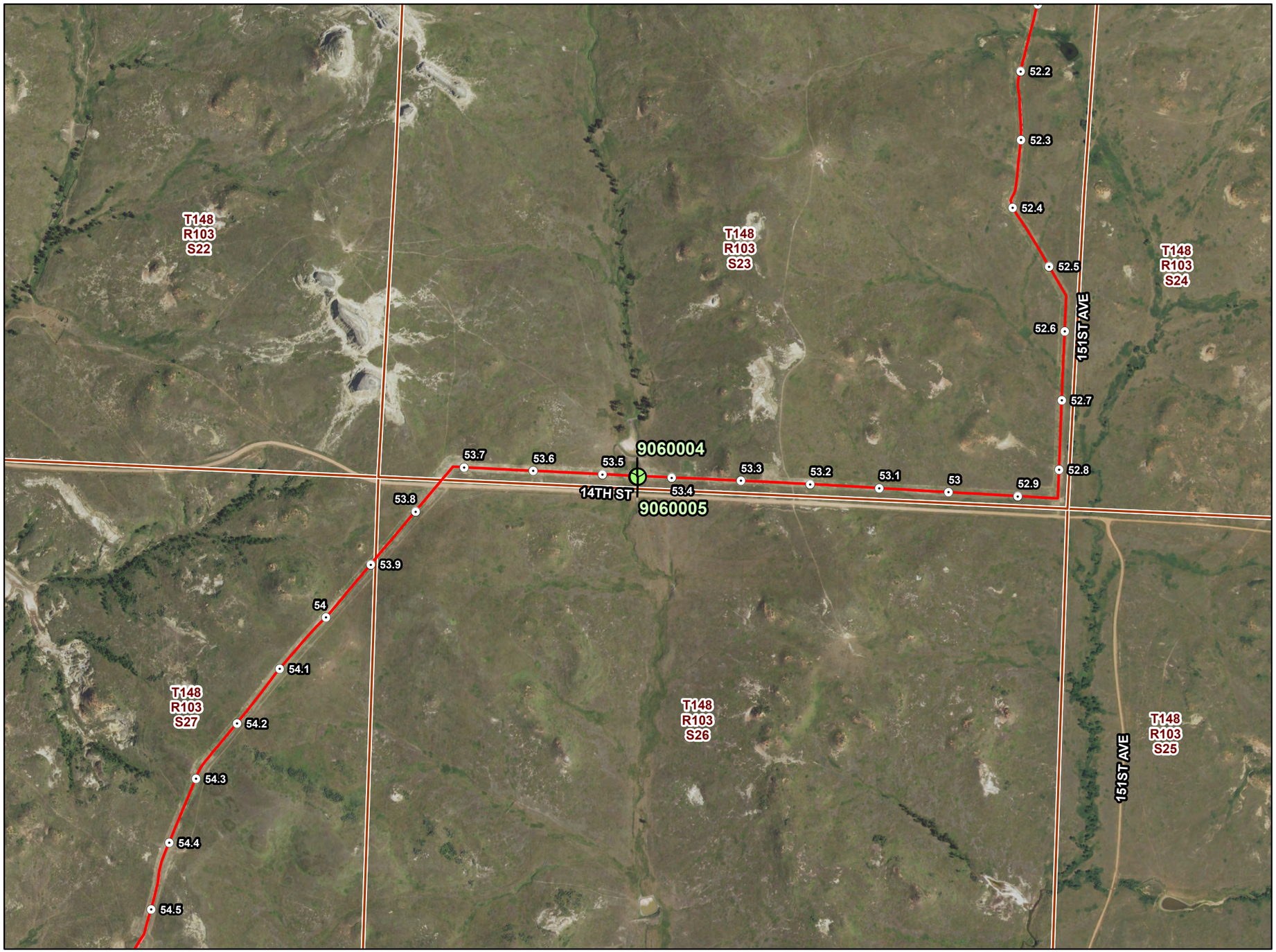
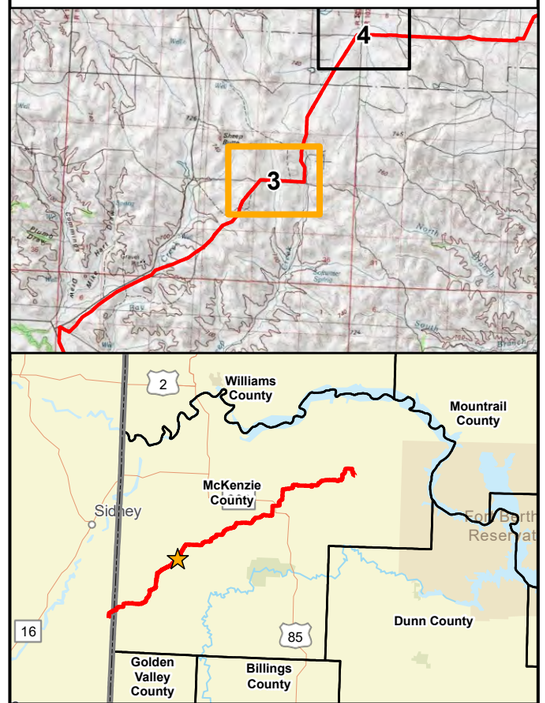
North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 3

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)





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2020 Aerial Photograph (Source: NAIP)

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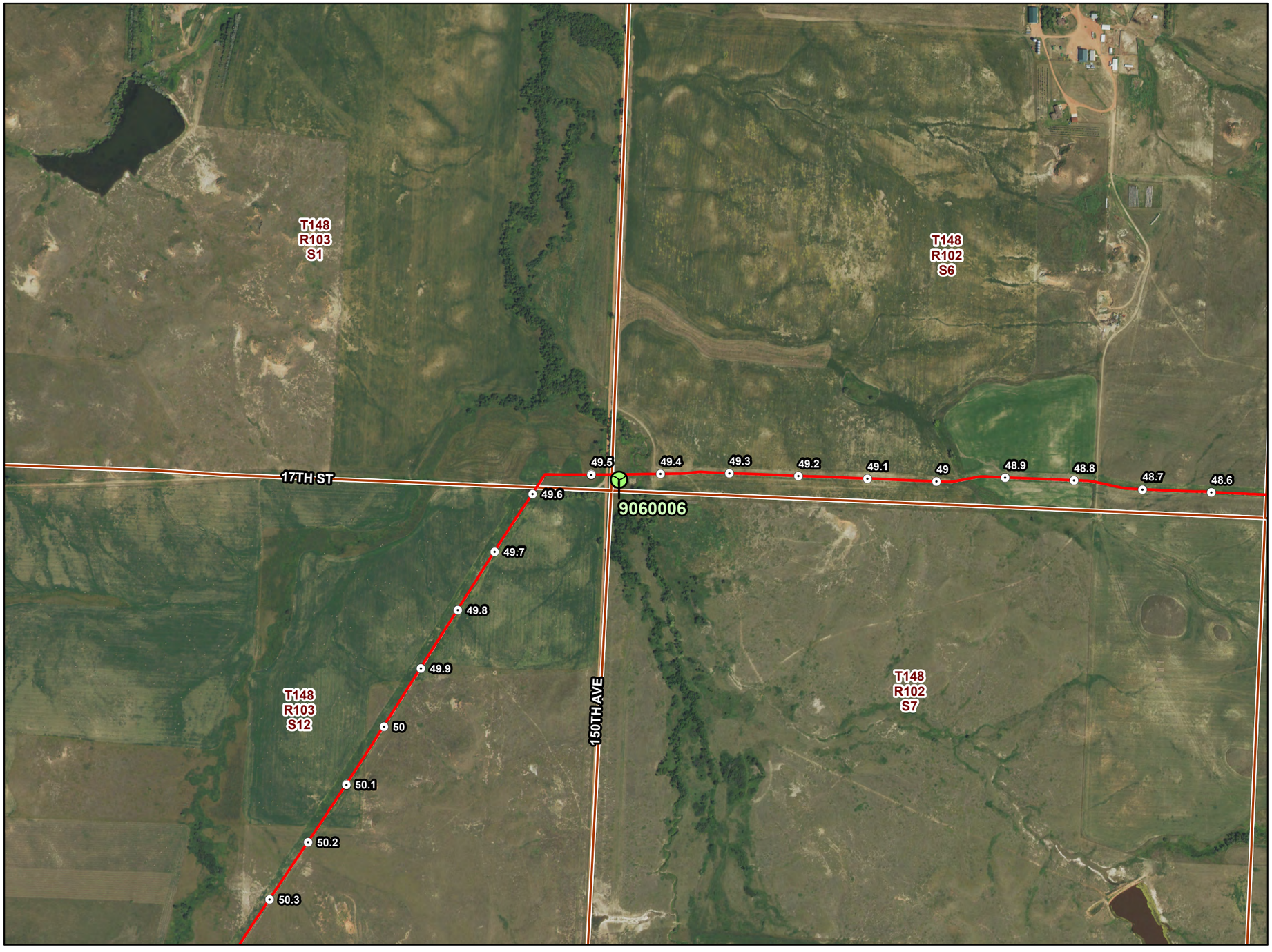
PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

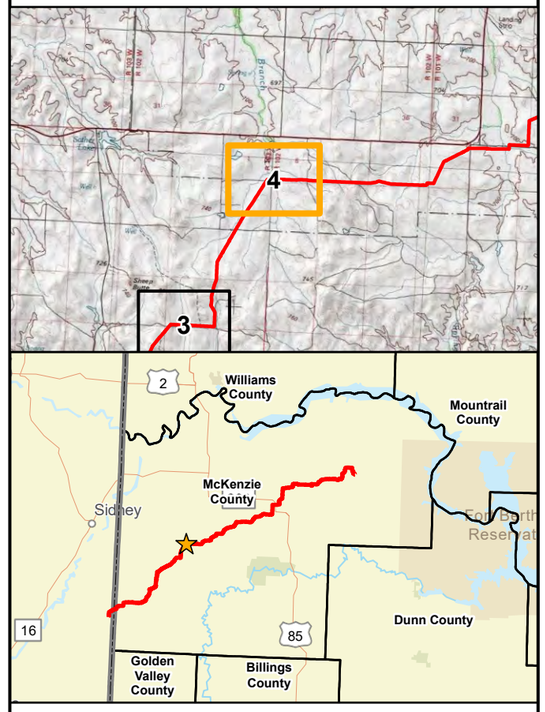
Map 3 of 20



North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 4

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



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Date: 2021-09-23 Time: 9:53 AM User: kjmueller

PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

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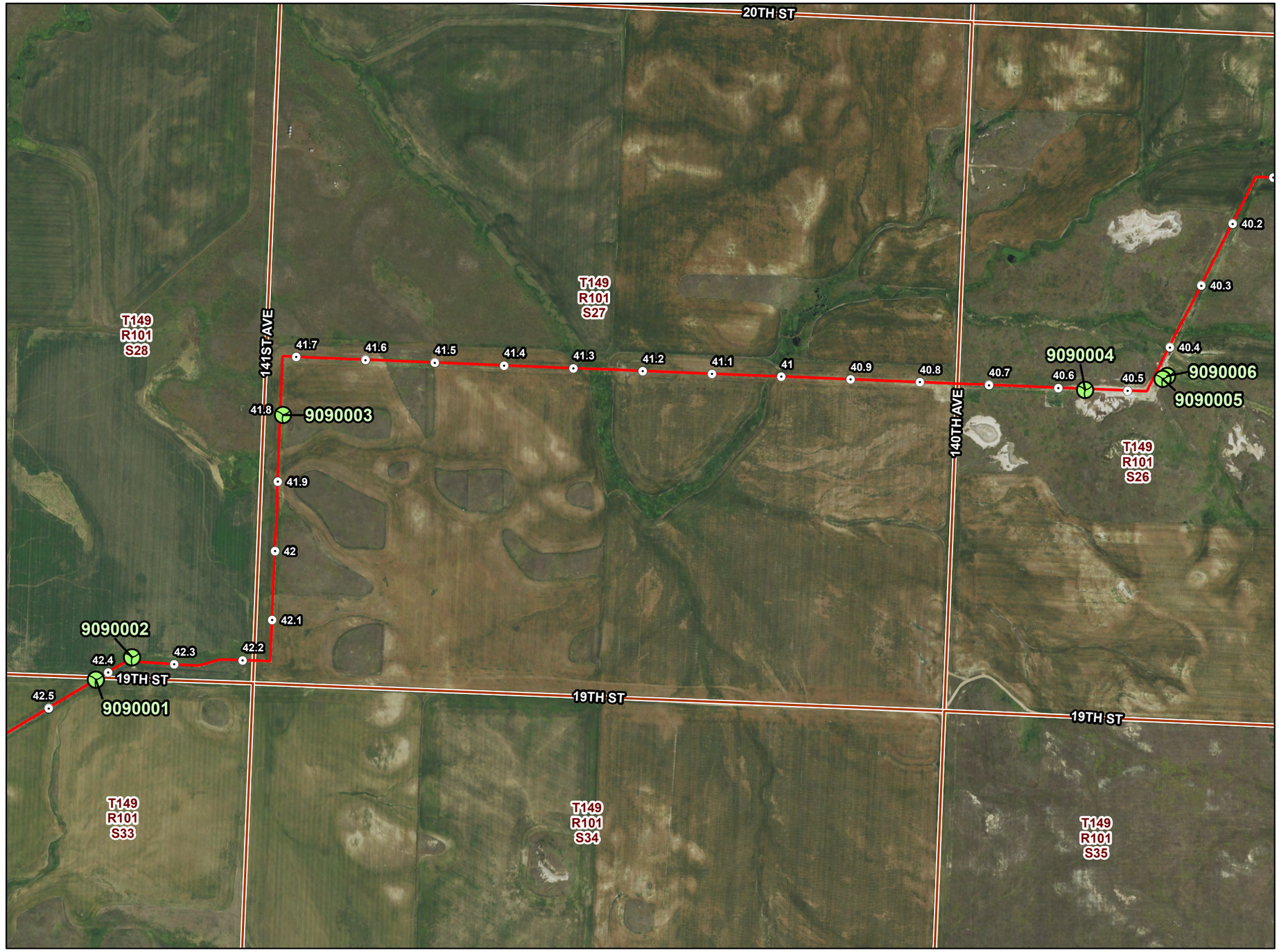
North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 5

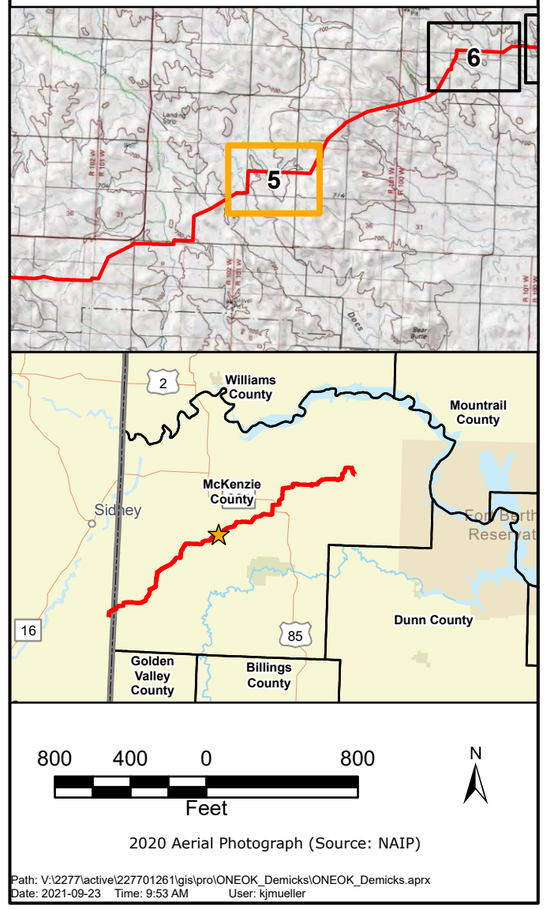


Reclamation/Revegetation Observation Point Location

Milepost

Demicks Lake As-Built Centerline (PU-18-399)

Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

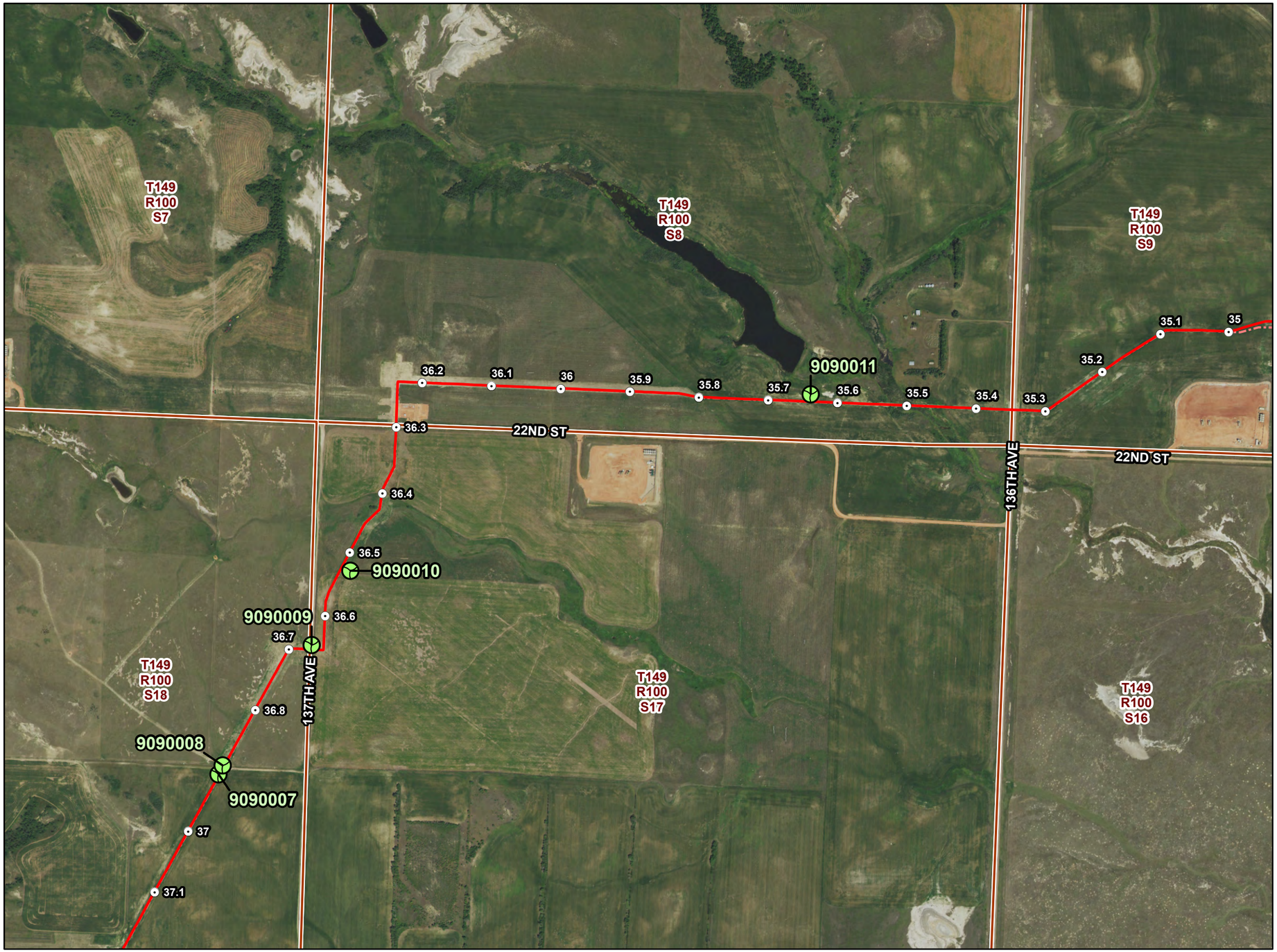
Stantec

SEP 2021

Map 5 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 6

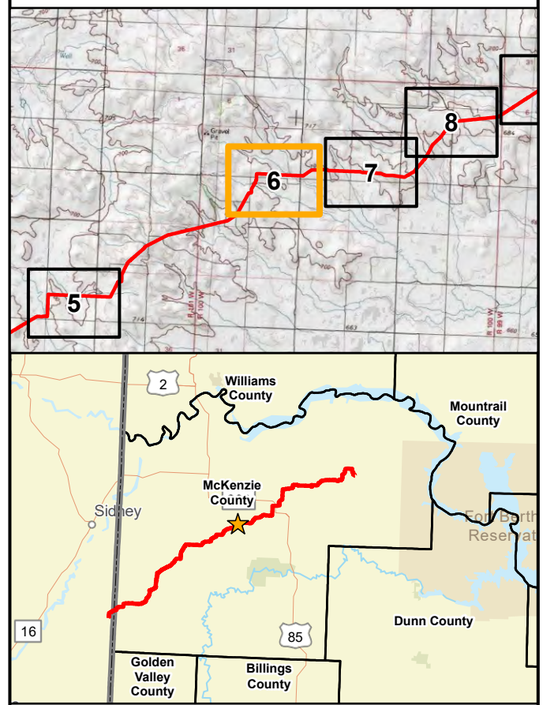


Reclamation/Revegetation Observation Point Location

Milepost

Demicks Lake As-Built Centerline (PU-18-399)

Demicks Lake Original Proposed Centerline (PU-18-399)



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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

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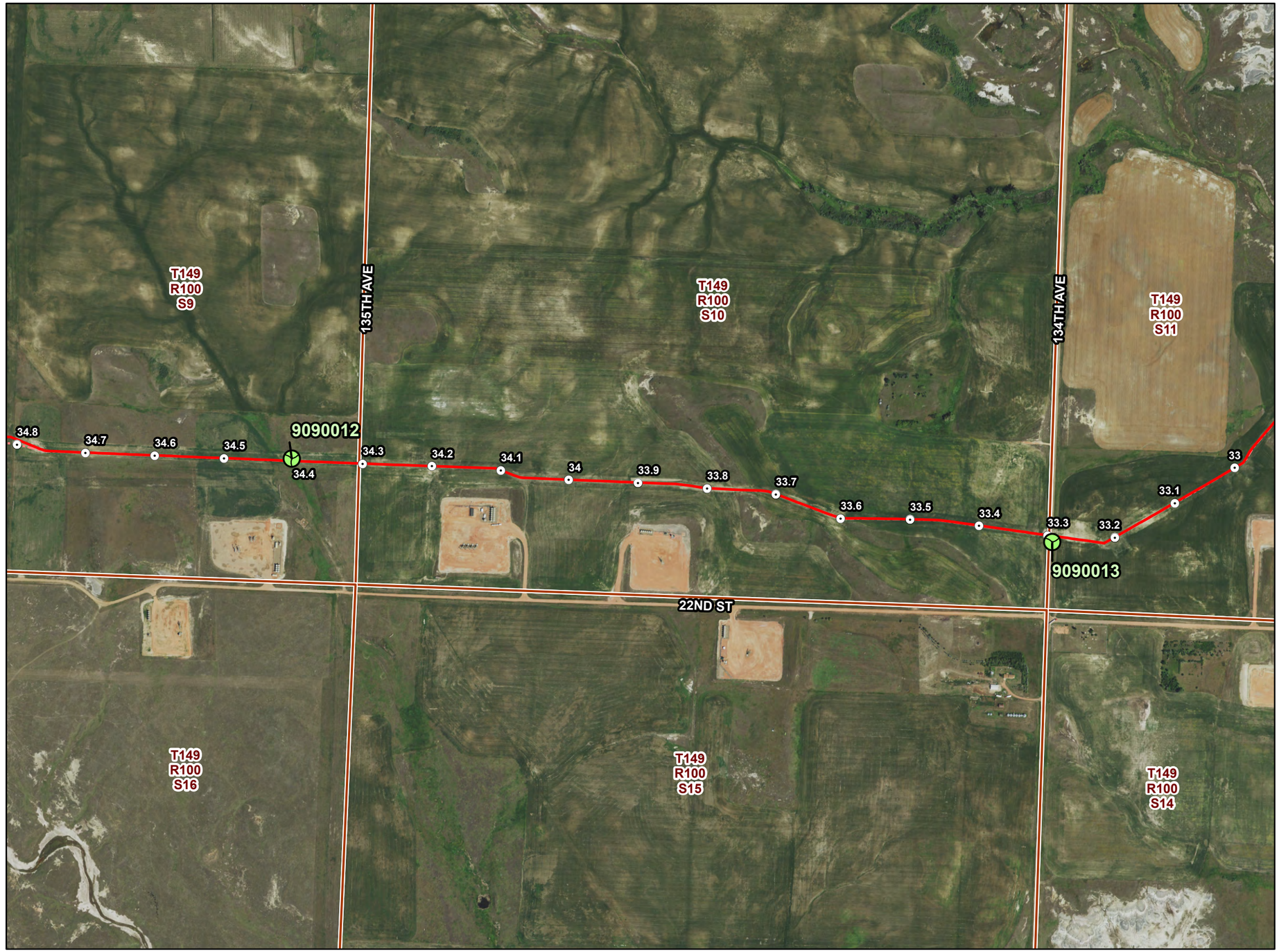
North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 7

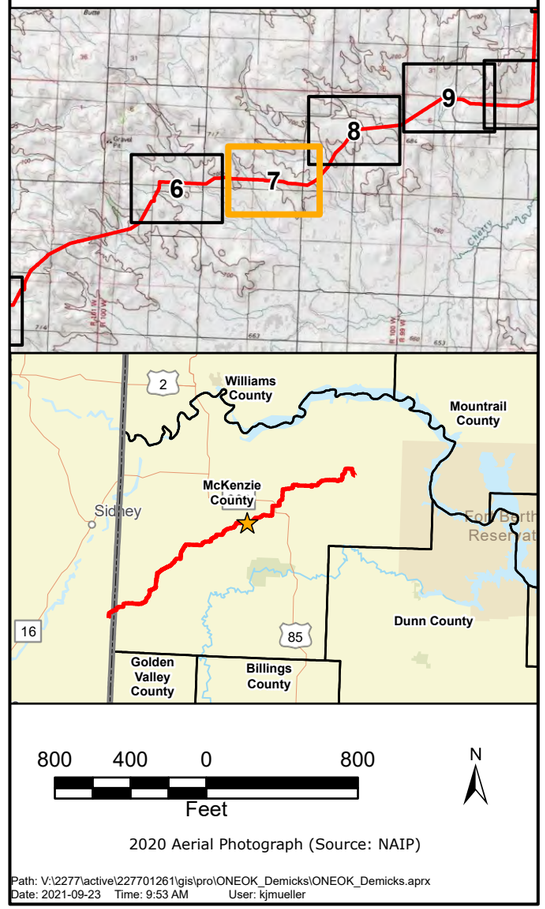


Reclamation/Revegetation Observation Point Location

Milepost

Demicks Lake As-Built Centerline (PU-18-399)

Demicks Lake Original Proposed Centerline (PU-18-399)



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Date: 2021-09-23 Time: 9:53 AM User: kjmueller

PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

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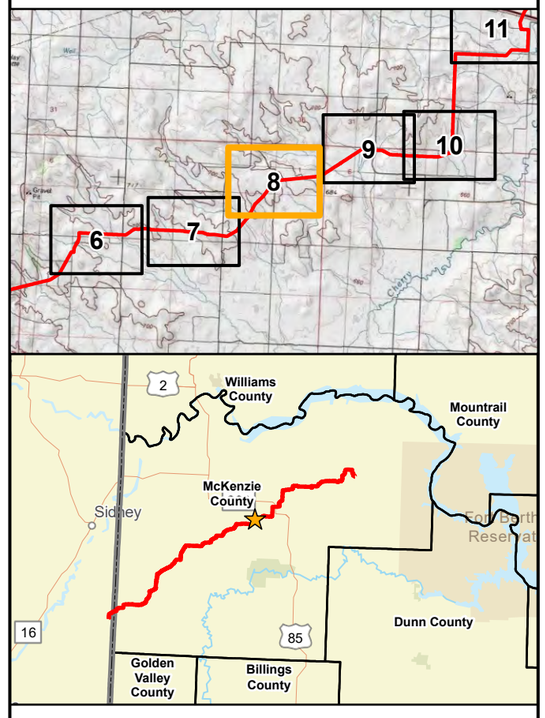
Map 7 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 8

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



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Feet

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Date: 2021-09-23 Time: 9:54 AM User: kjmueller

PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

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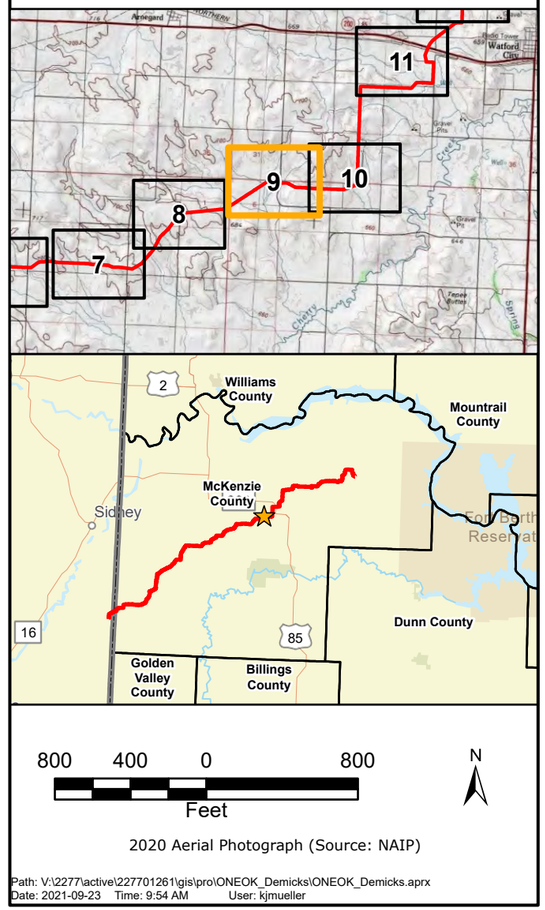
North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 9

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



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Date: 2021-09-23 Time: 9:54 AM User: kjmueller

PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

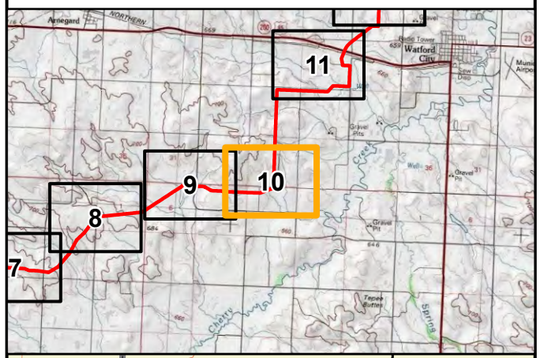
SEP 2021

Map 9 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 10

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



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Feet

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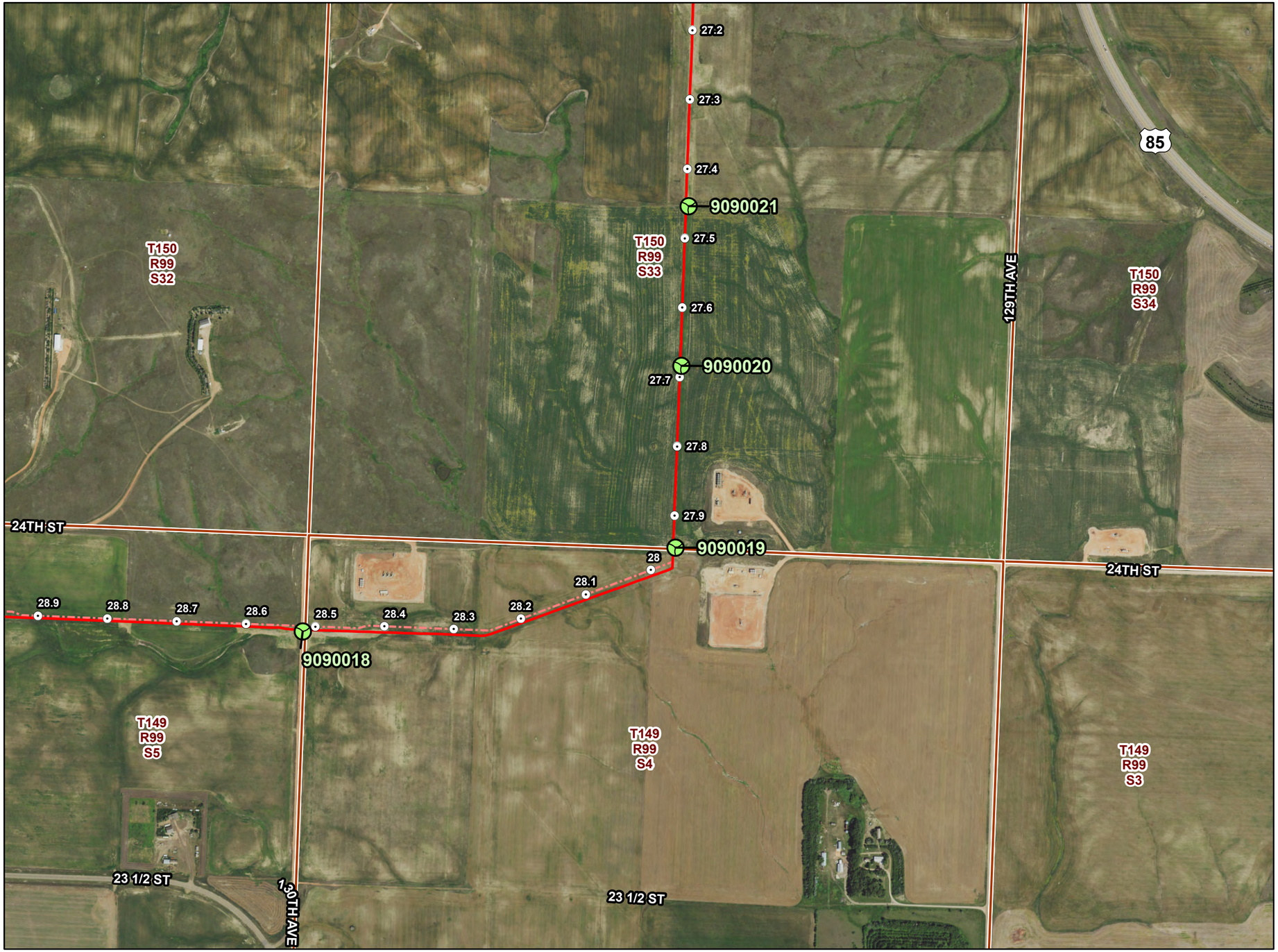


PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

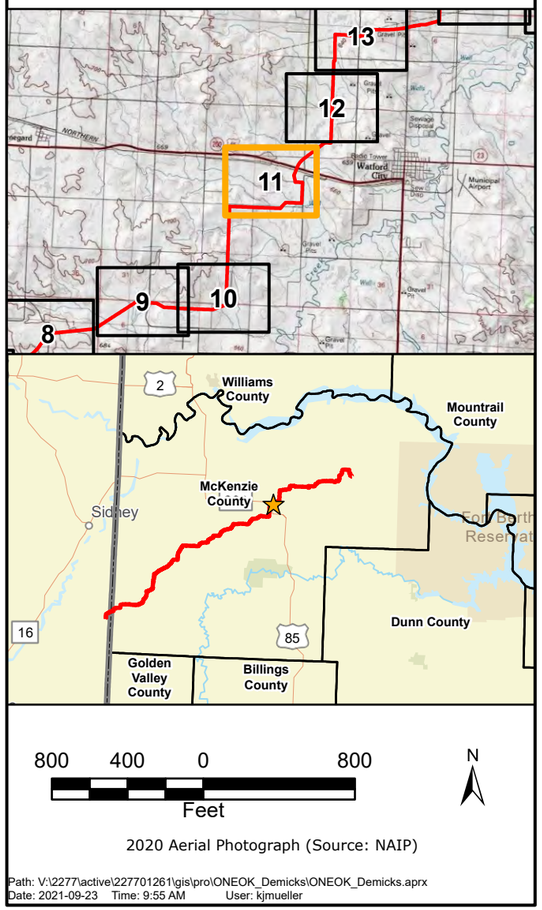
SEP 2021

Map 10 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 11

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



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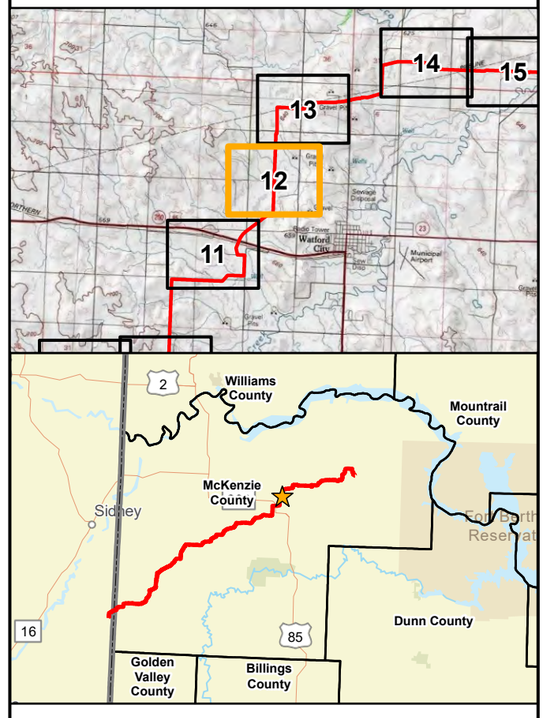
Date: 2021-09-23 Time: 9:55 AM User: kjmueller

PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION	Stantec	SEP 2021
Observation Point Map		Map 11 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 12

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



2020 Aerial Photograph (Source: NAIP)

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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

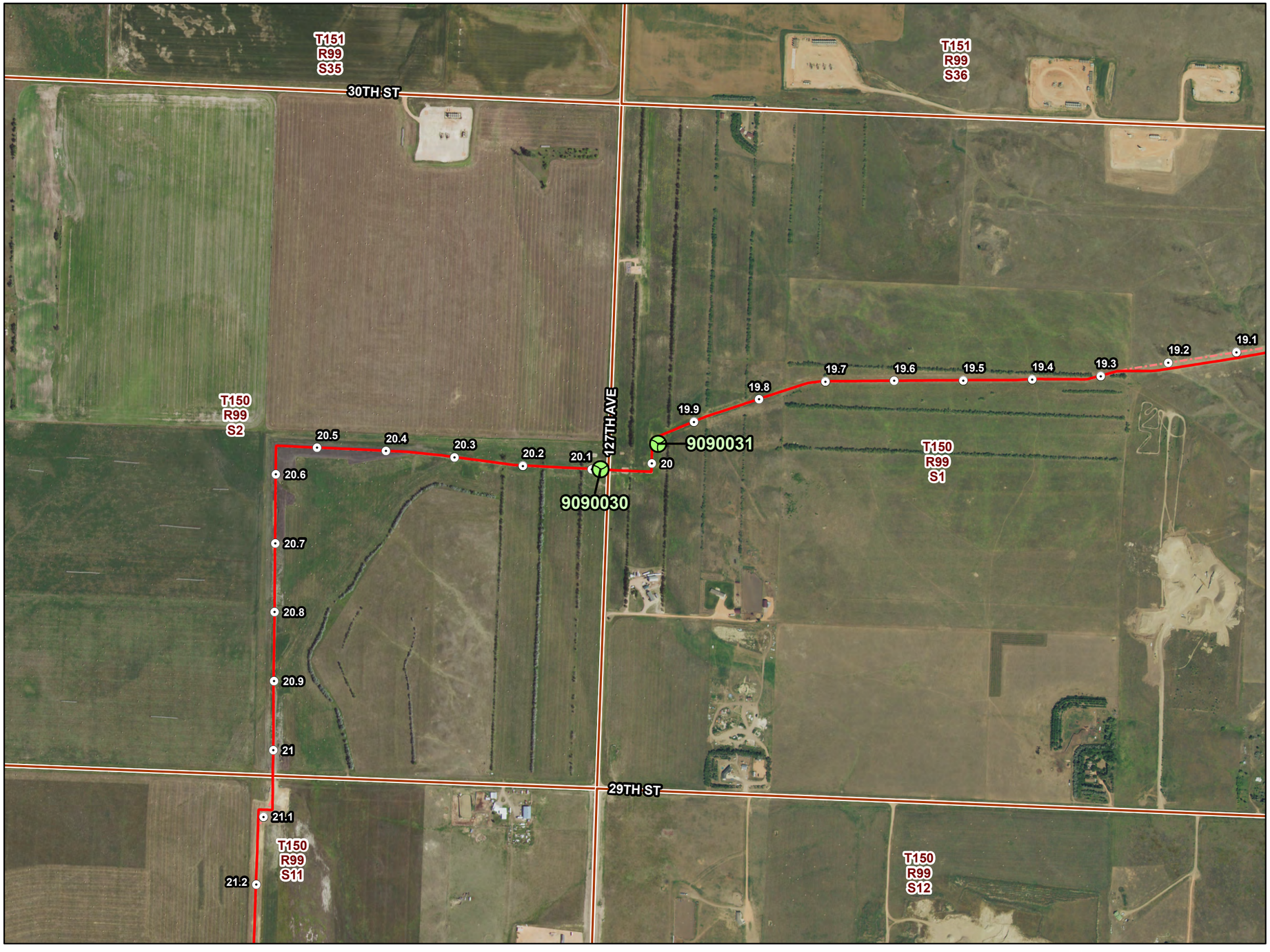
SEP 2021

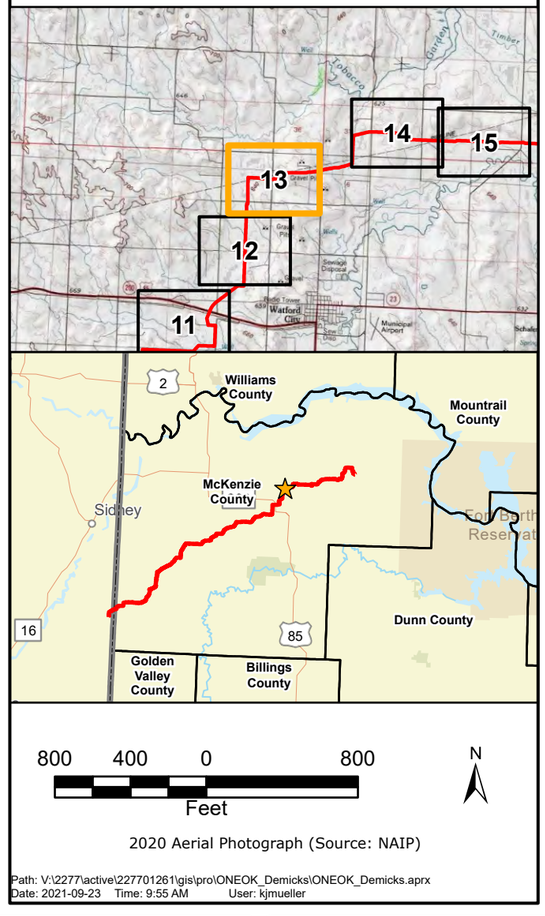
Map 12 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 13

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)





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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

Map 13 of 20

North Dakota Public Service Commission

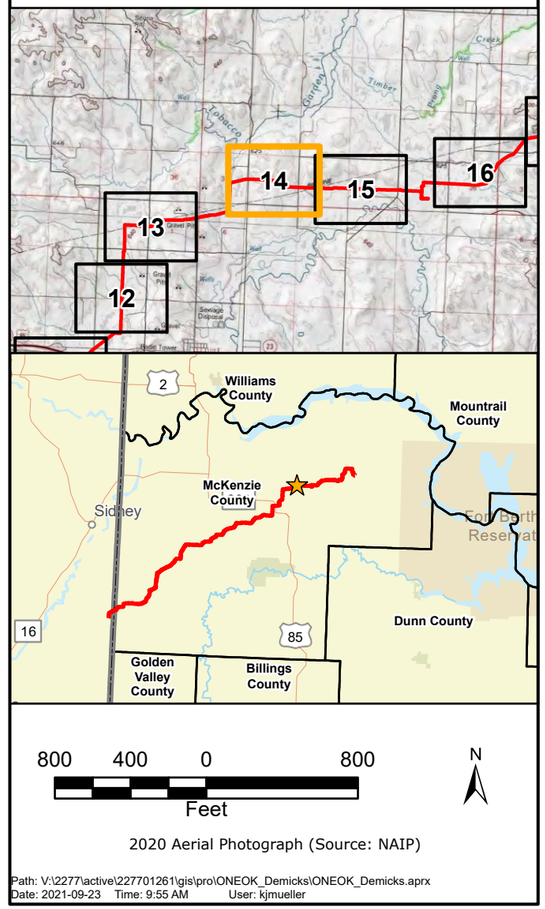
Demicks Lake Pipeline
Figure 14

Reclamation/Revegetation Observation Point Location

Milepost

Demicks Lake As-Built Centerline (PU-18-399)

Demicks Lake Original Proposed Centerline (PU-18-399)



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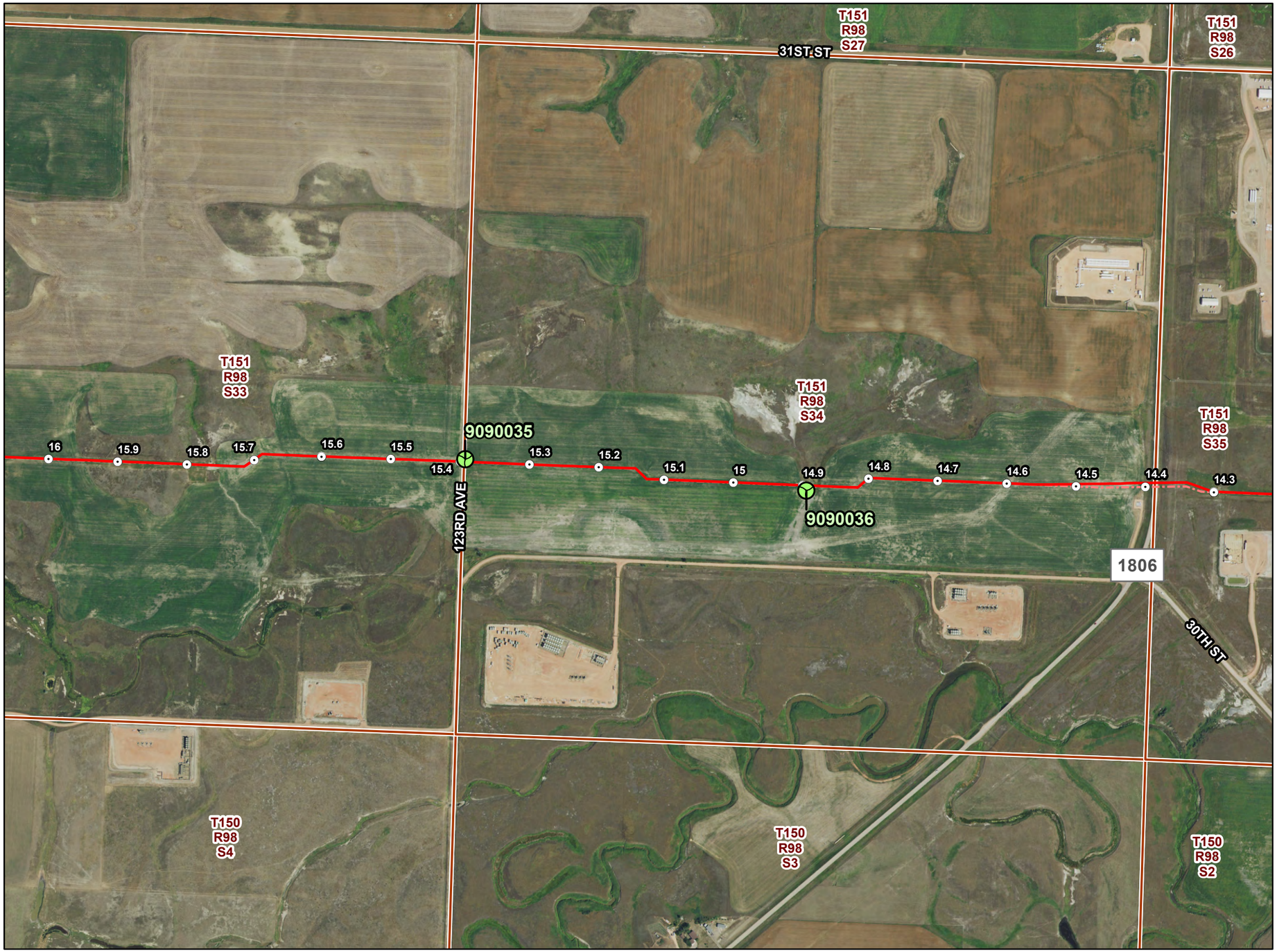
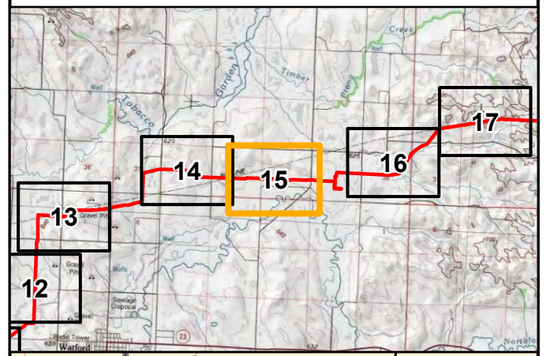
PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION	Stantec	SEP 2021
Observation Point Map		Map 14 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 15

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)





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Feet

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2020 Aerial Photograph (Source: NAIP)

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Date: 2021-09-23 Time: 9:56 AM User: kjmueller

PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

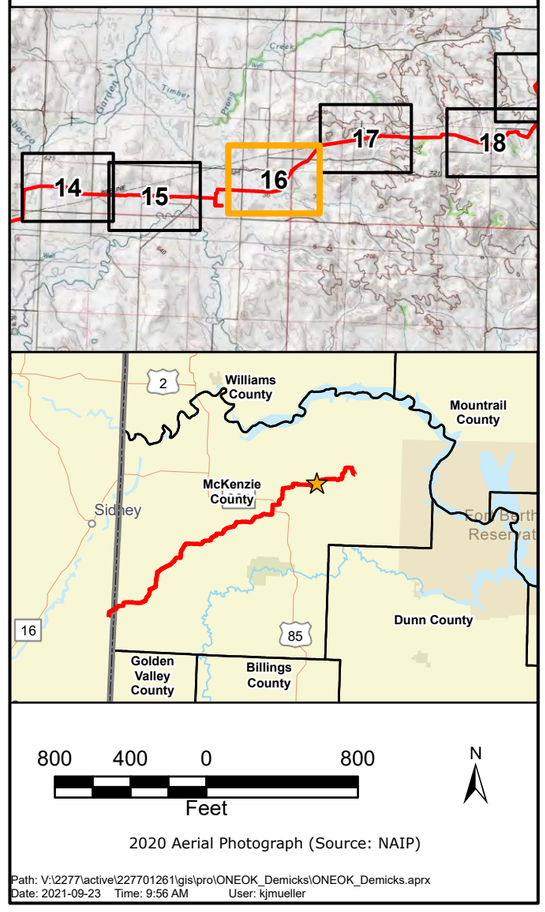
SEP 2021

Map 15 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 16

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)



PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

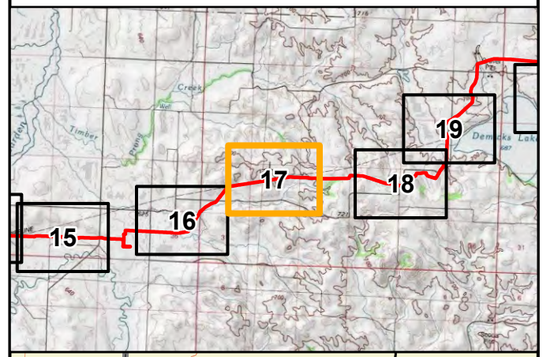
SEP 2021

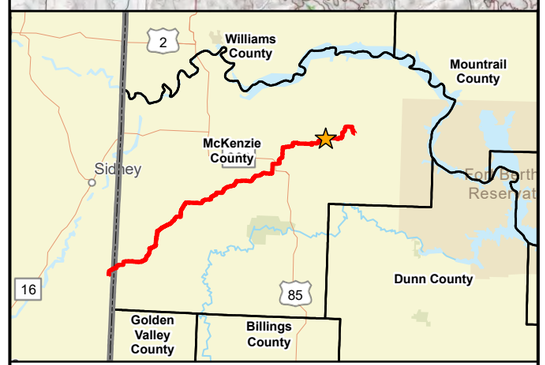
Map 16 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 17

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)





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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

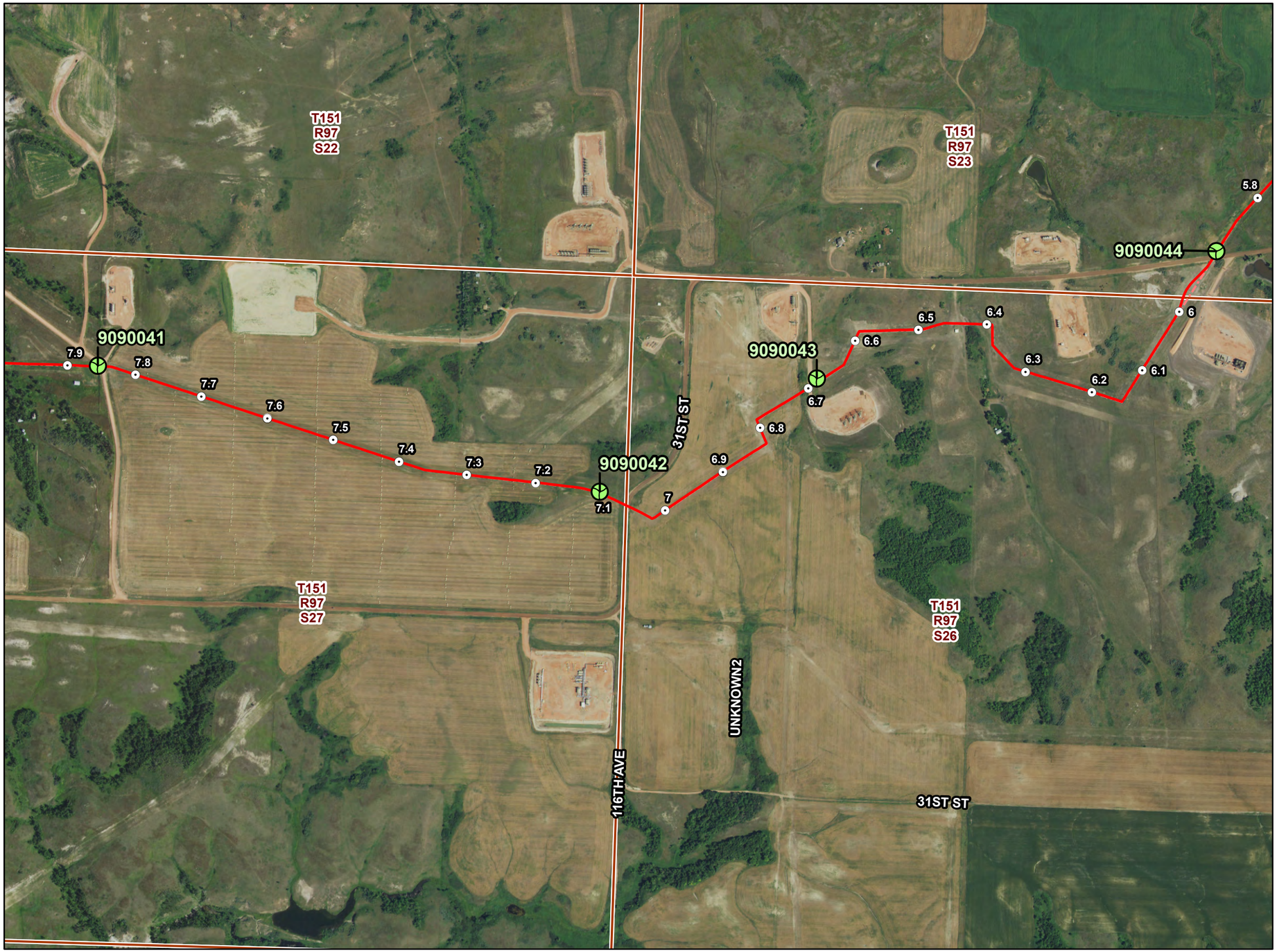
SEP 2021

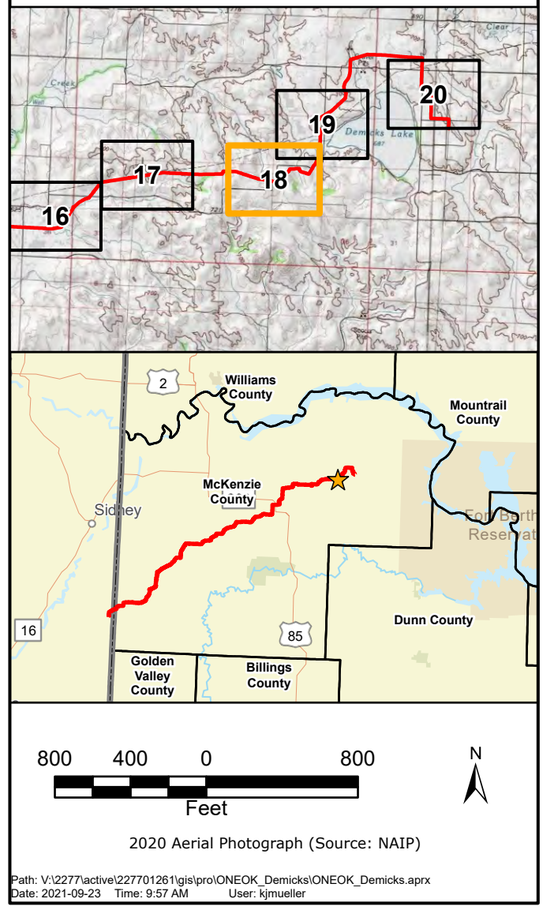
Map 17 of 20

North Dakota Public Service Commission

Demicks Lake Pipeline Figure 18

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)





PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

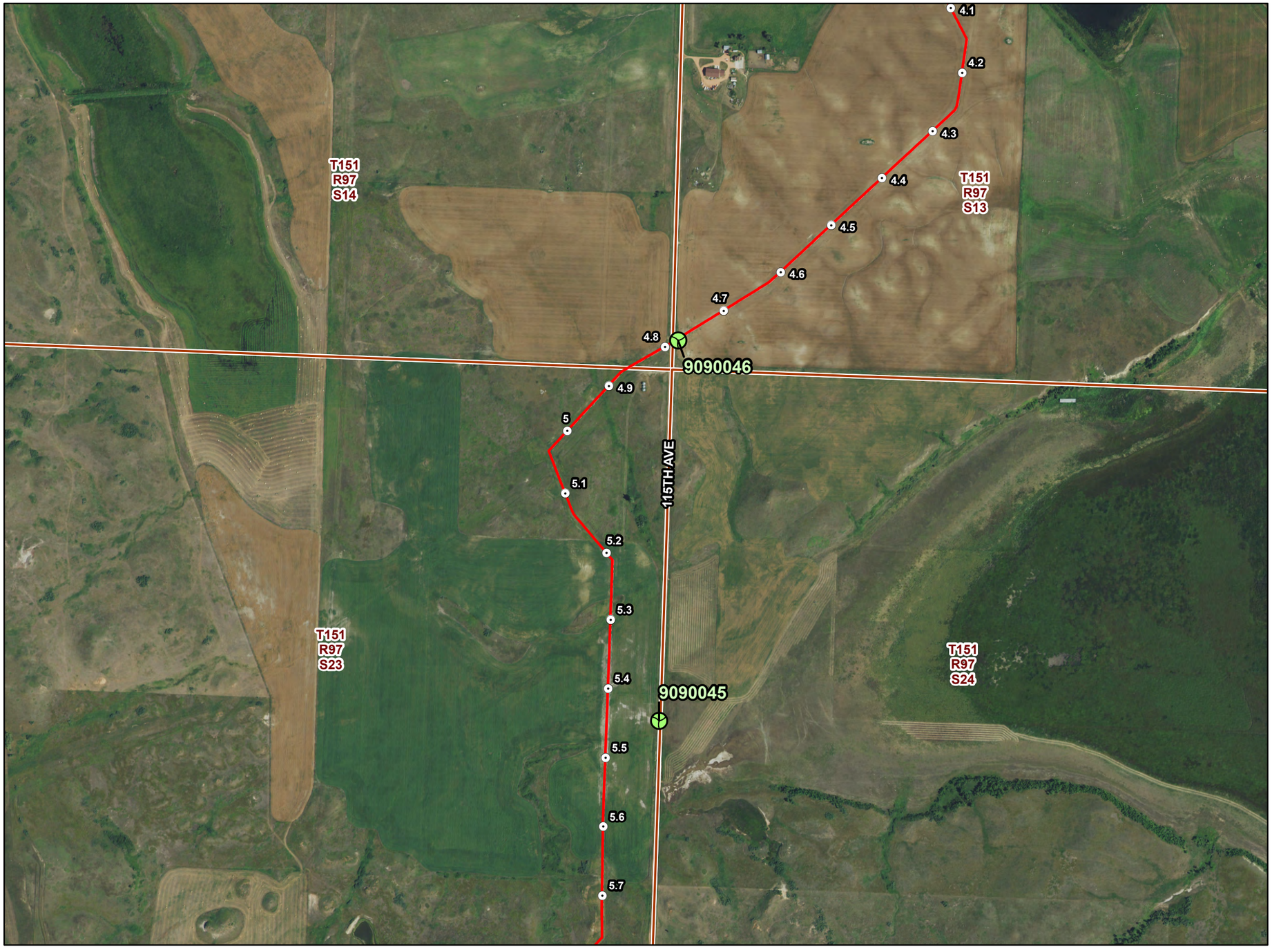
SEP 2021

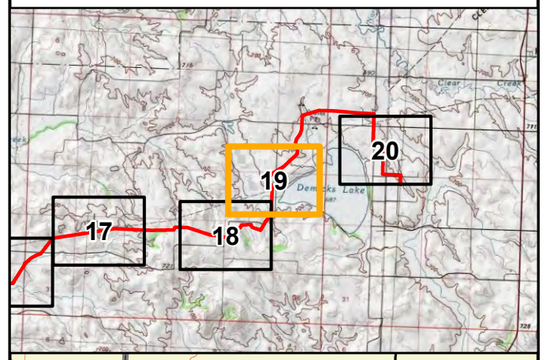
Map 18 of 20

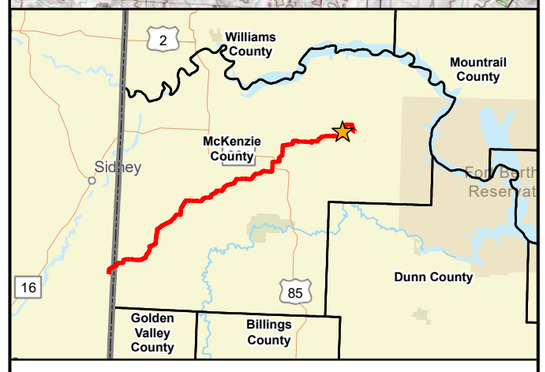
North Dakota Public Service Commission

Demicks Lake Pipeline
Figure 19

- Reclamation/Revegetation Observation Point Location
- Milepost
- Demicks Lake As-Built Centerline (PU-18-399)
- Demicks Lake Original Proposed Centerline (PU-18-399)







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Feet

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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

North Dakota Public Service Commission

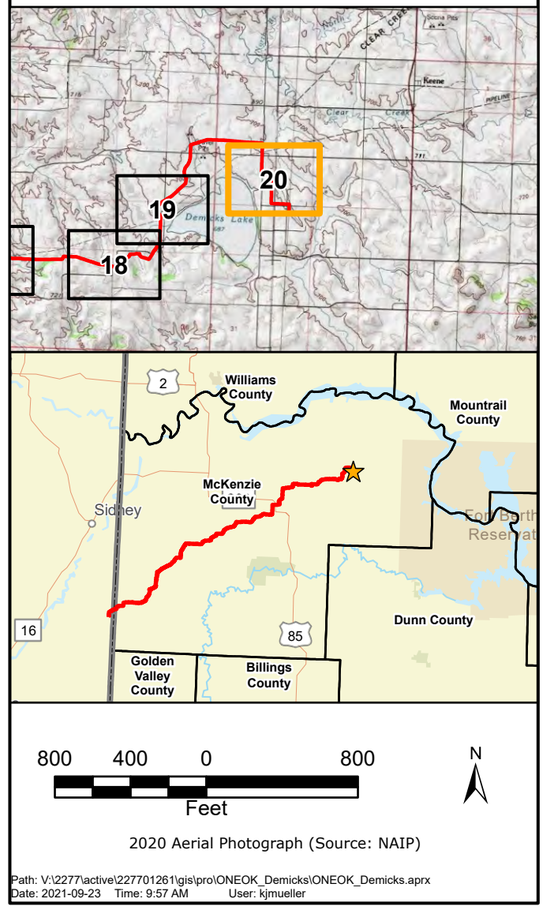
Demicks Lake Pipeline
Figure 20

Reclamation/Revegetation Observation Point Location

Milepost

Demicks Lake As-Built Centerline (PU-18-399)

Demicks Lake Original Proposed Centerline (PU-18-399)



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Feet

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PU-18-399 DEMICKS LAKE PIPELINE RECLAMATION/REVEGETATION INSPECTION

Observation Point Map

Stantec

SEP 2021

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APPENDIX A

Field Observation Coordinates

Field Observation Points

Observation Point #	Latitude	Longitude
9060001	47.481922	-103.919289
9060002	47.533327	-103.864379
9060003	47.5333406	-103.8643714
9060004	47.6188214	-103.7714133
9060005	47.618823	-103.7713945
9060006	47.662075	-103.735936
9090001	47.6890963	-103.6096412
9090002	47.6895935	-103.6085513
9090003	47.694779303972	-103.6041898590
9090004	47.6959733	-103.5794342
9090005	47.6962689	-103.5770556
9090006	47.6963304581558	-103.5769182889
9090007	47.7251009084619	-103.5217929923
9090008	47.7252905846466	-103.5216732197
9090009	47.7278740695576	-103.5190673692
9090010	47.7294547	-103.5179615
9090011	47.7335105	-103.5039418
9090012	47.7352084	-103.4783112
9090013	47.7340798809744	-103.4546937850
9090014	47.7507207	-103.4334544
9090015	47.7613624318978	-103.3960295434
9090016	47.7607768074621	-103.3902528285
9090017	47.7607622802492	-103.3893733538
9090018	47.7593933126217	-103.3690594708
9090019	47.7614284861365	-103.3576336031
9090020	47.7652232	-103.3576603
9090021	47.7685559	-103.3576182
9090022	47.7899376832219	-103.3575981826
9090023	47.7895699841017	-103.3568906649
9090024	47.7902060930036	-103.3349663969
9090025	47.7903843409254	-103.3348300650
9090026	47.7973702584835	-103.3298174185
9090027	47.7977105339876	-103.3299008033
9090028	47.806273039761	-103.3224348548
9090029	47.819315846	-103.315233663
9090030	47.840371536	-103.304839696
9090031	47.8409497692	-103.30307427
9090032	47.8551166726	-103.262559570
9090033	47.8551307277	-103.261942386
9090034	47.8533300191	-103.240598489
9090035	47.8535734449	-103.219189160
9090036	47.8532278047	-103.20877684

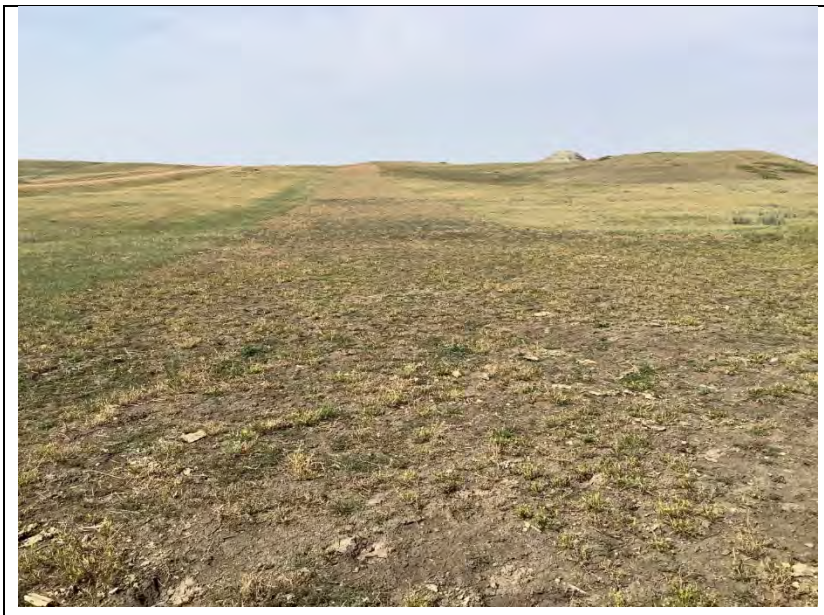
Observation Point #	Latitude	Longitude
9090037	47.8558778152	-103.17613038
9090038	47.8659353264	-103.147867867
9090039	47.8724630908	-103.123628051
9090040	47.873343	-103.123111
9090041	47.8741839863	-103.085708026
9090042	47.8719059034	-103.070014466
9090043	47.8744193329	-103.063396874
9090044	47.8773523677	-103.051137419
9090045	47.8835122198	-103.047816424
9090046	47.8914952997	-103.047612660
9090047	47.9067588	-103.0065812
9090048	47.8914353	-102.9945435
9090049	47.8914353	-102.9945435

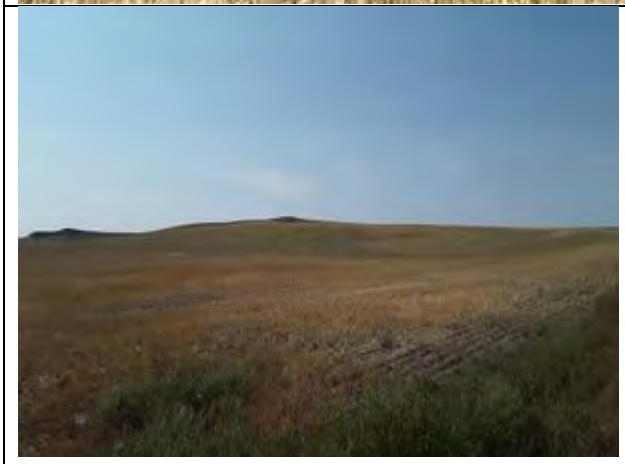
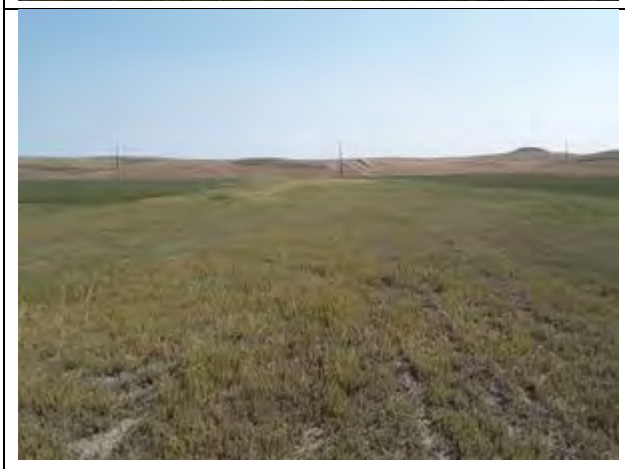
APPENDIX B

Observation Point Photolog

	**Observation Point: 9060001** Date Taken: September 6, 2021 Direction Photo is Taken: Southwest Photo Description: Photos from road show recovery of plant communities match surrounding croplands and ditch communities. Primary species include: western wheat grass, cut wheat and brome (*Bromus inermis*). ROW through ditch, crop field and grassland. Community types match surrounding lands. Latitude: 47.481922 Longitude: -103.919289
	**Observation Point: 9060001** Date Taken: September 6, 2021 Direction Photo is Taken: Northeast Photo Description: Photos from the road show recovery of plant communities to match surrounding croplands and ditch communities. Primary species include: western wheat grass, cut wheat and brome. Northeast of the road crossing there are no observable change in plant community species and surrounding lands. Vegetation consistent along ROW, through ditch, and crop field. Community types match surrounding lands. Latitude: 47.481922 Longitude: -103.919289

	**Observation Point: 9060002** Date Taken: September 6, 2021 Direction Photo is Taken: South Photo Description: Photos show recovery of plant communities to match surrounding pasture communities. Primary species include: western wheat grass, buffalo grass, yellow sweet clover, and gumweed among others. Northeast of the road crossing there are no observable changes in plant community species and surrounding lands. Latitude: 47.533327 Longitude: -103.864379
	**Observation Point: 9060003** Date Taken: September 6, 2021 Direction Photo is Taken: North Photo Description: ROW marker and surrounding pastured lands. Plant communities are sparser than surrounding lands but species match those of surrounding lands. Prickly Russian thistle present at road and along road ditch. Latitude: 47.5333406 Longitude: -103.8643714

	**Observation Point: 9060004** Date Taken: September 6, 2021 Direction Photo is Taken: West Photo Description: Swale with natural vegetation. Vegetative community is slowly recovering due to drought conditions. Not enough native plants in ROW to conclude the area will recover to match surrounding pasture. Species include western wheatgrass, gray thistle, yellow sweet clover, curly-cup gumweed, and hairy golden aster. Latitude: 47.6188 Longitude: -103.7714133
	**Observation Point: 9060005** Date Taken: September 6, 2021 Direction Photo is Taken: East Photo Description: Field drain crossing where tree/vegetation matches surrounding community Latitude: 47.618823 Longitude: -103.7713945

	**Observation Point: 9060006** Date Taken: September 6, 2021 Direction Photo is Taken: East Photo Description: Fully vegetated ROW and valve station, which matches surrounding area. Latitude: 47.662075 Longitude: -103.735936
	**Observation Point: 9090001** Date Taken: September 9, 2021 1:09 PM Direction Photo is Taken: Southwest Photo Description: Small-grain field with a few kochia patches in ROW. Crop stand density matches surrounding undisturbed field. Latitude: 47.6890963 Longitude: -103.6096412
	**Observation Point: 9090002** Date Taken: September 9, 2021 1:03 PM Direction Photo is Taken: East Photo Description: Historically cropped ROW contains 90% weedy species. Species include: kochia, prickly Russian thistle, and volunteer oat from 2020 cover crop. Apparent land use change to hay land from historic aerial imagery. Latitude: 47.6895935 Longitude: -103.6085513

	**Observation Point: 9090003** Date Taken: September 9, 2021 1:25 PM Direction Photo is Taken: North Photo Description: Historic aerial imagery suggests grassland land use, but ROW is now under crop production. Stantec could not determine if that is the preferred land use by land owner, or if there were seeding activities by ONEOK. Latitude: 47.694779303972 Longitude: -103.604189859029
	**Observation Point: 9090004** Date Taken: September 9, 2021 12:42 PM Direction Photo is Taken: East Photo Description: Weeds and bare topsoil with severe accumulation of salts at surface. PSC may want to inquire with ONEOK about seeding and undesirable weed control. Latitude: 47.6959733 Longitude: -103.5794342

	**Observation Point: 9090005** Date Taken: September 9, 2021 12:50 PM Direction Photo is Taken: North Photo Description: Vegetation cover improves northward from 9090004 beyond saline area Latitude: 47.6962689 Longitude: -103.5770556
	**Observation Point: 9090006** Date Taken: September 9, 2021 12:47 PM Direction Photo is Taken: Northwest Photo Description: Bare saline soil like Point 9090004. Vegetation quality improves in ROW going north. Pasture land use. Latitude: 47.6963304581558 Longitude: -103.576918288905

	**Observation Point: 9090007** Date Taken: September 9, 2021 2:00 PM Direction Photo is Taken: Southwest Photo Description: Kochia is dominating the cropland ROW relative to outside the ROW. Latitude: 47.7251009084619 Longitude: -103.521792992384
	**Observation Point: 9090008** Date Taken: September 9, 2021 2:03 PM Direction Photo is Taken: Northeast Photo Description: Desired grass stand is sparse, while kochia is abundant. Drought may be affecting seeded grasses. The ROW seems to be mowed. Latitude: 47.7252905846466 Longitude: -103.521673219726
	**Observation Point: 9090009** Date Taken: September 9, 2021 2:13 PM Direction Photo is Taken: West Photo Description: Kochia is present but not overwhelming. Sweet clover, crested wheatgrass is also present. Adequate absolute vegetation cover. Latitude: 47.7278740695576 Longitude: -103.519067369208

	**Observation Point: 9090010** Date Taken: September 9, 2021 2:20 PM Direction Photo is Taken: North Photo Description: Fair absolute vegetative cover including smooth brome, kochia, alfalfa, and crested wheat grass Latitude: 47.7294547 Longitude: -103.5179615
	**Observation Point: 9090011** Date Taken: September 9, 2021 2:32 PM Direction Photo is Taken: East Photo Description: Hayed small-grain field. Several bare areas without topsoil or vegetation, which may need to be addressed. Species observed were wheat, green foxtail, and kochia. Latitude: 47.7335105 Longitude: -103.5039418
	**Observation Point: 9090012** Date Taken: September 9, 2021 2:47 PM Direction Photo is Taken: West Photo Description: Stark lack of perennial grasses in the hay land. Future growing seasons may bring improvements with more moisture. Observed species were: alfalfa, yellow sweet clover, kochia (very dense), and Canada thistle. Latitude: 47.7352084 Longitude: -103.4783112

Observation Point: 9090013
Date Taken: September 9, 2021 3:03 PM
Direction Photo is Taken: Northeast

Photo Description: Wheat crop stand looks consistent with surrounding areas. Kochia is persistent outside of ROW, too. Overall typical. May need to coordinate with landowners to control weeds.

Latitude: 47.7340798809744
Longitude: -103.454693785042

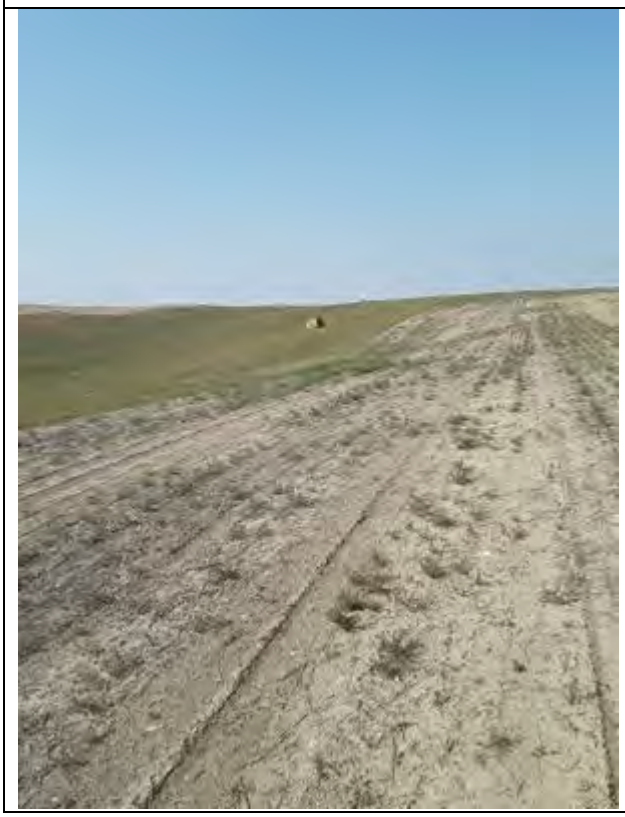
Observation Point: 9090014
Date Taken: September 9, 2021 11:33 AM
Direction Photo is Taken: West

Photo Description: Dense kochia infestation in cropped ROW. No kochia in undisturbed areas

Latitude: 47.7507207
Longitude: -103.4334544

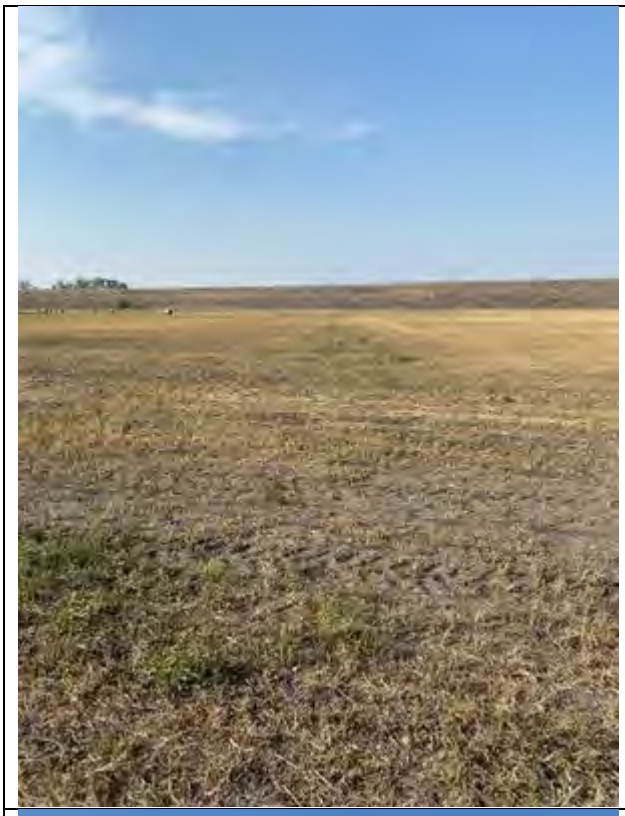
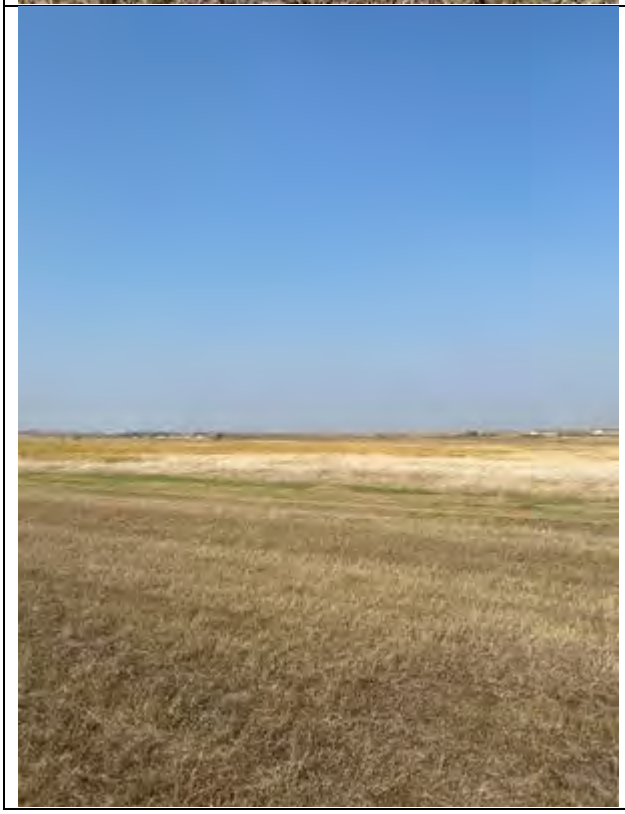
	**Observation Point: 9090015** Date Taken: September 9, 2021 3:41 PM Direction Photo is Taken: Southeast Photo Description: Appropriate vegetation in cattle pasture. Latitude: 47.7613624318978 Longitude: -103.396029543494
	**Observation Point: 9090016** Date Taken: September 9, 2021 3:27 PM Direction Photo is Taken: Northeast Photo Description: Some kind of leftover soil pile disturbance. Aerial Imagery suggest this pile existed prior to Project construction. Latitude: 47.7607768074621 Longitude: -103.39025282855

	**Observation Point: 9090017** Date Taken: September 9, 2021 3:33 PM Direction Photo is Taken: East Photo Description: Vegetation cover is less than surrounding, undisturbed area, but still moderately high. Species observed are lambsquarter, foxtail barley, Canada thistle, curly dock, wheatgrass, all recently mowed. This area is a riverine NWI location, and likely conveys water in a normal climatic years. No signs of erosion observed. Latitude: 47.7607622802492 Longitude: -103.389373353829
	**Observation Point: 9090018** Date Taken: September 9, 2021 3:55 PM Direction Photo is Taken: East Photo Description: Kochia is consistent and dense throughout both the reclaimed ROW and undisturbed land. Latitude: 47.7593933126217 Longitude: -103.369059470881

	**Observation Point: 9090019** Date Taken: September 9, 2021 4:11 PM Direction Photo is Taken: North Photo Description: Poor vegetation growth on ROW. Kochia is the dominant species in ROW. Clear signs of seeding and drilling, but likely drought stress has prevented desired species growth. Latitude: 47.7614284861365 Longitude: -103.357633603181
	**Observation Point: 9090020** Date Taken: September 9, 2021 4:16 PM Direction Photo is Taken: North Photo Description: Poor vegetation growth compared to outside-of-ROW hay land. Lack of desired species could be due to drought, but small, seeded grasses were visible. Latitude: 47.7652232 Longitude: -103.3576603

	**Observation Point: 9090021** Date Taken: September 9, 2021 4:20 PM Direction Photo is Taken: North Photo Description: Mowed kochia surrounded by brome outside of the ROW. Vegetation density and cover does not match surrounding land, but it is expected to progress during future growing seasons. Latitude: 47.7685559 Longitude: -103.3576182
	**Observation Point: 9090022** Date Taken: September 9, 2021 4:35 PM Direction Photo is Taken: North Photo Description: Access road is poorly reclaimed, and sparsely vegetated with weeds. Follow-up work is recommended. Latitude: 47.7899376832219 Longitude: -103.357598182638
	**Observation Point: 9090023** Date Taken: September 9, 2021 4:38 PM Direction Photo is Taken: East Photo Description: Vegetation recolonizing the hillside ROW. There were little desired grasses, with kochia and prickly Russian thistle dominant. The ROW does not match surrounding area. Latitude: 47.7895699841017 Longitude: -103.35689066498

	**Observation Point: 9090024** Date Taken: September 9, 2021 5:17 PM Direction Photo is Taken: Southwest Photo Description: High absolute vegetation cover. Kochia is dominant. Surrounding areas contain alfalfa, smooth brome, crested wheatgrass. Grasses may need reseeding if germination does not occur in 2022. Latitude: 47.7902060930036 Longitude: -103.334966396946
	**Observation Point: 9090025** Date Taken: September 9, 2021 5:20 PM Direction Photo is Taken: Northeast Photo Description: High absolute vegetation cover. Surrounding areas contain alfalfa, smooth brome, crested wheatgrass. Latitude: 47.7903843409254 Longitude: -103.334830065085
	**Observation Point: 9090026** Date Taken: September 9, 2021 5:07 PM Direction Photo is Taken: East Photo Description: High absolute vegetation cover, containing mostly lambsquarter and cattails. Grasses are in the surrounding area but no grass in right of way Latitude: 47.7973702584835 Longitude: -103.329817418525

	**Observation Point: 9090027** Date Taken: September 9, 2021 5:09 PM Direction Photo is Taken: North Photo Description: Vegetation is consistent throughout and matches surround areas. Latitude: 47.7977105339876 Longitude: -103.329900803326
	**Observation Point: 9090028** Date Taken: September 9, 2021 4:57 PM Direction Photo is Taken: Northeast Photo Description: Wetland is bored under with the HDD method. Latitude: 47.806273039761 Longitude: -103.322434854808

	**Observation Point: 9090029** Date Taken: September 9, 2021 5:33 PM Direction Photo is Taken: North Photo Description: Mowed kochia. It appears the ROW was mowed in select areas throughout the Project to control weeds. Latitude: 47.8193158467974 Longitude: -103.315233663891
	**Observation Point: 9090030** Date Taken: September 9, 2021 5:43 PM Direction Photo is Taken: Photo Description: Overall revegetation is in good standing. Desired grass and alfalfa dominate ROW, but kochia is present too. Generally reclamation of project matches landscape outside of ROW. Latitude: 47.840371536487 Longitude: -103.304839696901

Observation Point: 9090031
Date Taken: September 9, 2021 5:46 PM
Direction Photo is Taken: West

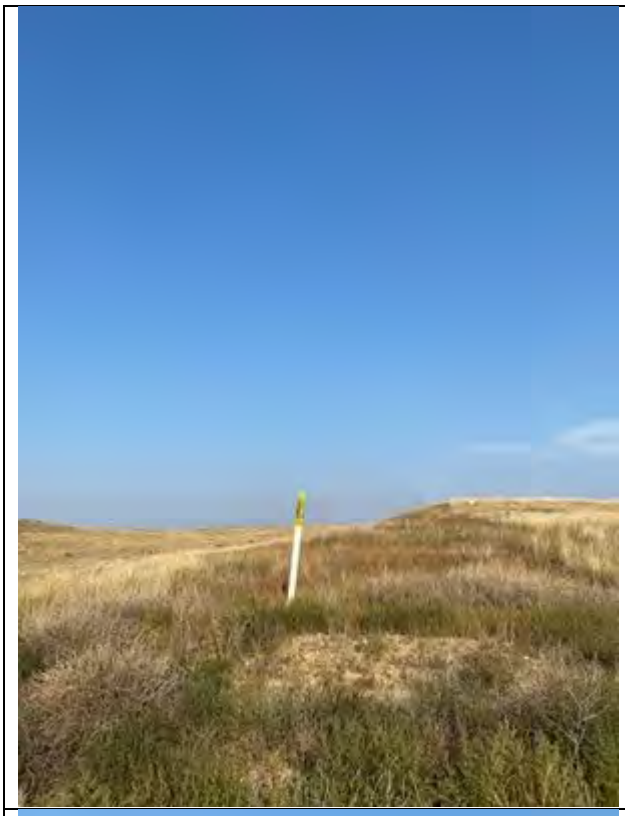
Photo Description: Vegetation has not been fully restored to pre-construction conditions. Species include alfalfa, perennial grass, and Lambsquarter. However, vegetation is expected to trend toward successful restoration over time.

Latitude: 47.8409497692047
Longitude: -103.30307427072

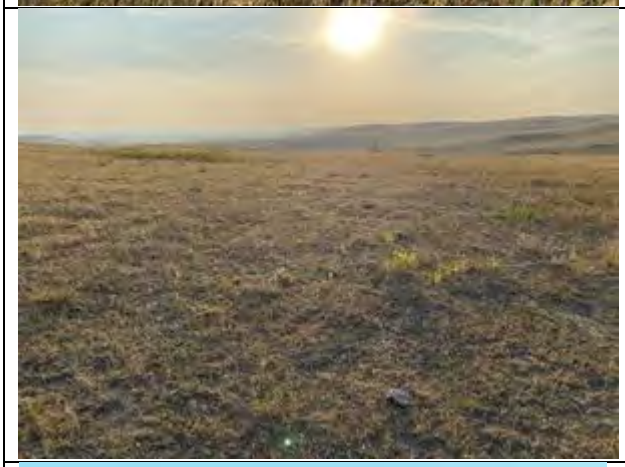
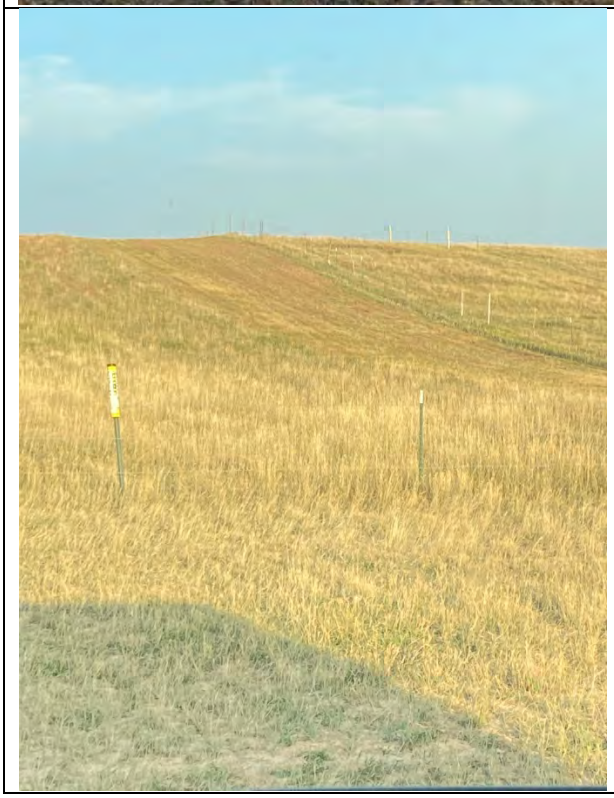
Observation Point: 9090032
Date Taken: September 9, 2021 6:07 PM
Direction Photo is Taken: West

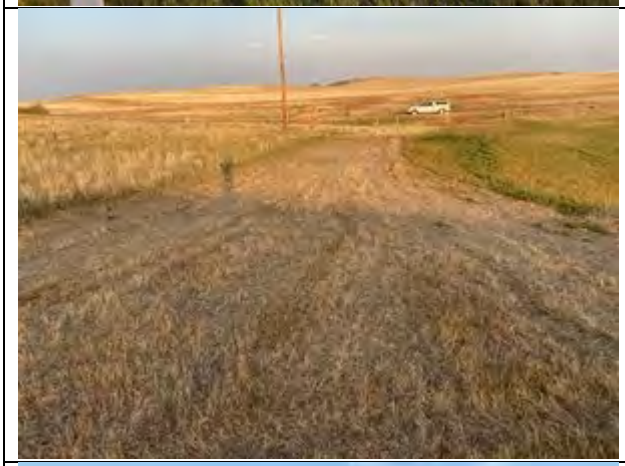
Photo Description: Sweetclover and alfalfa filling in ROW hay land. Kochia is minimal. Trees along shelter belt removed. ROW will likely match surrounding areas with more grass cover over time.

Latitude: 47.8551166726955
Longitude: -103.262559570909

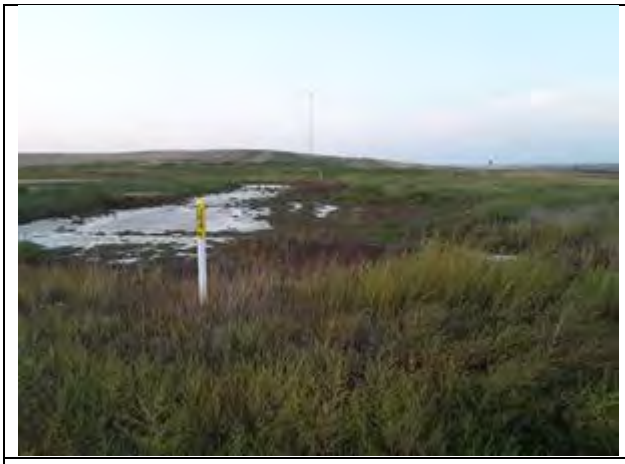
	**Observation Point: 9090033** Date Taken: September 9, 2021 6:04 PM Direction Photo is Taken: East Photo Description: Crested wheatgrass dominant in surrounding area. ROW contains mostly kochia and prickly Russian thistle. Latitude: 47.8551307277698 Longitude: -103.261942386018
	**Observation Point: 9090034** Date Taken: September 9, 2021 6:16 PM Direction Photo is Taken: East Photo Description: Historic land use is presumably cropland but existing condition land-use in ROW is difficult to ascertain. Short, dry veg visible with crested wheatgrass in adjacent areas. Grass coming in somewhat, but appears stressed from drought. Latitude: 47.8533300191241 Longitude: -103.240598489013

	**Observation Point: 9090035** Date Taken: September 9, 2021 6:27 PM Direction Photo is Taken: East Photo Description: Mowed prickly Russian thistle and kochia, and very poor cover crop. However, these conditions are similar to surrounding areas which appear to contain multiple pipeline alignments nearby. Latitude: 47.8535734449217 Longitude: -103.219189160555
	**Observation Point: 9090036** Date Taken: September 9, 2021 6:33 PM Direction Photo is Taken: East Photo Description: Sparsely vegetated slope drainage. Soil is likely naturally saline, and there is evidence of cattle activity. Kochia is the dominant species inside and outside the ROW. Latitude: 47.8532278047766 Longitude: -103.20877684757
	**Observation Point: 9090037** Date Taken: September 9, 2021 6:53 PM Direction Photo is Taken: East Photo Description: Millet hay field. Stunted or stressed in ROW more than surrounding field. Overall this area appears to meet practical restoration standards. Latitude: 47.8558778152449 Longitude: -103.17613038442

	**Observation Point: 9090038** Date Taken: September 9, 2021 7:01 PM Direction Photo is Taken: Northeast Photo Description: Vegetation dominated by kochia, prickly Russian thistle, and some smooth brome. May need future weed control to promote the alfalfa and grasses present in surrounding hay land. Latitude: 47.8659353264838 Longitude: -103.147867867437
	**Observation Point: 9090039** Date Taken: September 9, 2021 7:07 PM Direction Photo is Taken: West Photo Description: Unique/rare species area understood to utilized HDD installation techniques. Unrelated pipeline alignments located nearby. It is unclear if this ROW was used for an access road, or if it was left undisturbed. If recently reclaimed, it is exemplary. Latitude: 47.8724630908416 Longitude: -103.123628051315
	**Observation Point: 9090040** Date Taken: September 9, 2021 7:20 PM Direction Photo is Taken: East Photo Description: ROW has less vegetation growth compared to surrounding area, and may have been recently mowed. ROW appears to be reclaimed to practical status. Latitude: 47.873343 Longitude: -103.123111

	**Observation Point: 9090041** Date Taken: September 9, 2021 7:20 PM Direction Photo is Taken: West Photo Description: Brome emerging, overall adequate vegetation and reclamation status. Minor weedy species and cover present. Many other pipeline alignments in this area. Latitude: 47.8741839863484 Longitude: -103.085708026184
	**Observation Point: 9090042** Date Taken: September 9, 2021 7:28 PM Direction Photo is Taken: East Photo Description: Seeded grass coming in, and other non-grass vegetation is dead. it is unclear if it was recently sprayed. Mowing is evident, some alfalfa is also in the right of way. Time will benefit the revegetation to meet acceptable restoration. Latitude: 47.8719059034055 Longitude: -103.070014466248
	**Observation Point: 9090043** Date Taken: September 9, 2021 7:33 PM Direction Photo is Taken: Northeast Photo Description: Kochia, yellow sweet clover, and grasses present. No bare areas, and the ROW will likely fill in in coming years with more moisture/precipitation. Recently Mowed. Many other ROW's present nearby. Latitude: 47.8744193329153 Longitude: -103.063396874445

	**Observation Point: 9090044** Date Taken: September 9, 2021 7:37 PM Direction Photo is Taken: Northeast Photo Description: Abundant grass species, yellow sweet clover, with no presence of weeds. Restoration consistent with surrounding area species. Latitude: 47.8773523677857 Longitude: -103.051137419489
	**Observation Point: 9090045** Date Taken: September 9, 2021 7:40 PM Direction Photo is Taken: West Photo Description: Pasture is vegetated in saline right of way. Matches surrounding land use. Acceptable reclamation. Latitude: 47.8835122198393 Longitude: -103.047816424097
	**Observation Point: 9090046** Date Taken: September 9, 2021 7:44 PM Direction Photo is Taken: Northeast Photo Description: Wheat in ROW is matching surrounding area. Weeds present throughout the entire field, not a concern specific to the ROW only. Latitude: 47.8914952997523 Longitude: -103.047612660526

	**Observation Point: 9090047** Date Taken: September 9, 2021 7:53 PM Direction Photo is Taken: North Photo Description: Saline depression not reclaimed to pre-construction conditions and lacks vegetation observed adjacent to ROW. This spot was previously noted during as-built inspection. Latitude: 47.9067588 Longitude: -103.0065812
No Photo	**Observation Point: 9090048** Date Taken: September 9, 2021 8:01 PM Direction Photo is Taken: West Photo Description: Crop field with minimal weeds. Reclaimed well. No Photo. Latitude: 47.8914353 Longitude: -102.9945435
	**Observation Point: 9090049** Date Taken: September 9, 2021 8:04 PM Direction Photo is Taken: West Photo Description: Bare area in photo of possible subsoil mixing, but in a field of flax that matches undisturbed areas. Latitude: 47.8914353 Longitude: -102.9945435