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October 9, 2017

Mr. Darrell Nitschke
Executive Director
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480



Dear Mr. Nitschke:

In re: Cenex Pipeline, LLC
Case No. PU-17-097
Late Filed Exhibit No. 24
Our File No. 020836-000001

Enclosed for filing are 11 copies of Late Filed Exhibit No. 24 – Dakota Skipper Avoidance Strategy Report for the above matter. Also being filed is a Certificate of Service relating to the Report.

Very truly yours,

Brian R. Bjella

bw
enc.
cc: Administrative Judge Timothy J. Dawson (w/enc)
Derrick Braaten (w/enc)
Zachary Pelham (w/enc)
Kevin Pranis (w/enc)

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Cenex Pipeline, LLC
10" Refined Fuels Pipeline – Williams, Mountrail, Ward
Siting Application**

PU-17-097

CERTIFICATE OF SERVICE

I hereby certify that on October 9, 2017, the following document:

1. Late Filed Exhibit No. 24 – Dakota Skipper Avoidance Strategy Report

was served via U.S. mail and e-mail upon the following:

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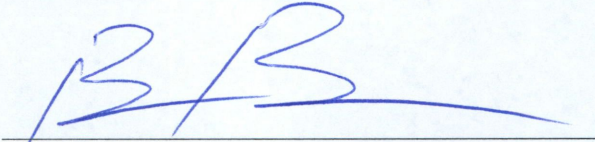
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Dated this 9th day of October, 2017.

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By



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Cenex Pipeline LLC
Refined Fuels Pipeline
Sidney to Minot
(North Dakota Segment Only)
Williams, Mountrail & Ward Counties,
North Dakota

Dakota Skipper Avoidance Strategy Report

Prepared for:
Cenex Pipeline LLC

Prepared by:
KLJ
Bismarck, North Dakota

October 2017



CONTENTS

I.	Introduction	1
II.	Location	2
III.	Methods	4
	A. Vegetation.....	4
	B. Soil.....	4
IV.	Existing Conditions	6
	A. Landscape Setting	6
	B. Avoidance Methods	6
V.	Conclusion	8
VI.	References	9

Figure 1, Location Map.....	3
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Table 1, Common Grasses and Forbs of Dakota Skipper Habitat	5
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Appendix A, Dakota Skipper Habitat Avoidance Maps



I. INTRODUCTION

KLJ was contracted by Cenex Pipeline LLC (Cenex) to conduct Dakota skipper habitat surveys for the construction of a 149.7-mile (North Dakota portion) 10-inch pipeline containing refined crude oil (i.e. gas and diesel) in Williams, Mountrail & Ward Counties. The project falls under the North Dakota Public Service Commission (PSC) siting regulations for a Transmission Facility project, therefore, the PSC must grant a Certificate of Corridor Compatibility and Route Permit approving project development. A PSC Public Hearing was held for the proposed project on July 24 and 25, 2017. During the hearing, the PSC commission requested a Dakota Skipper Avoidance Strategy Plan be developed by Cenex to ensure the project minimizes disturbance to the species.

The 3,584-acre study area is approximately 200 feet wide centered on the proposed 149.7-mile pipeline route. The field delineation was conducted by Kory Rude, Reed Scott, Tom Naas, Tyler Conley, Jacob Lardy, Jeff Moss, Steve Czczok and Jessica Creuzer of KLJ in 2016 on May 17-18, June 14-16, 29-30, July 18-21, 25-28, August 22-25, September 19, 28-29, October 5-6, 11-13, and November 14-16, and in 2017 on April 26-27, 17-18, and August 15. The proposed project contained primarily agricultural crop and rangeland and non-native mixed grass prairie, with sparse wooded areas and parcels of native rangeland.

A US Fish and Wildlife (USFWS) IPaC Trust Resources Report search for Williams, Mountrail and Ward Counties revealed potential for Dakota skipper (*Hesperia dacotae*) is located within Mountrail and Ward Counties. No critical habitat is within or directly adjacent to the environmental study area (USFWS ECOS IPaC, 2016). No Dakota skipper were observed during the time of the surveys and construction of the proposed project is not anticipated to have any negative impacts on the species due to the commitment made by Cenex at the PSC Public Hearing to avoid impacts to habitat.



II. LOCATION

The proposed project begins approximately three miles southeast of Sidney, Montana; however, for this report only Dakota skipper habitat within the listed counties in North Dakota have been analyzed. The North Dakota portion of the project begins at the North Dakota/Montana border approximately 5.8 miles north of Fort Buford in Williams County in Section 22, Township 153 North, Range 104 West and terminates approximately one mile west of Minot, North Dakota at a Cenex facility in Section 20, Township 155 North, Range 83 West. Please see *Figure 1, Location Map*.



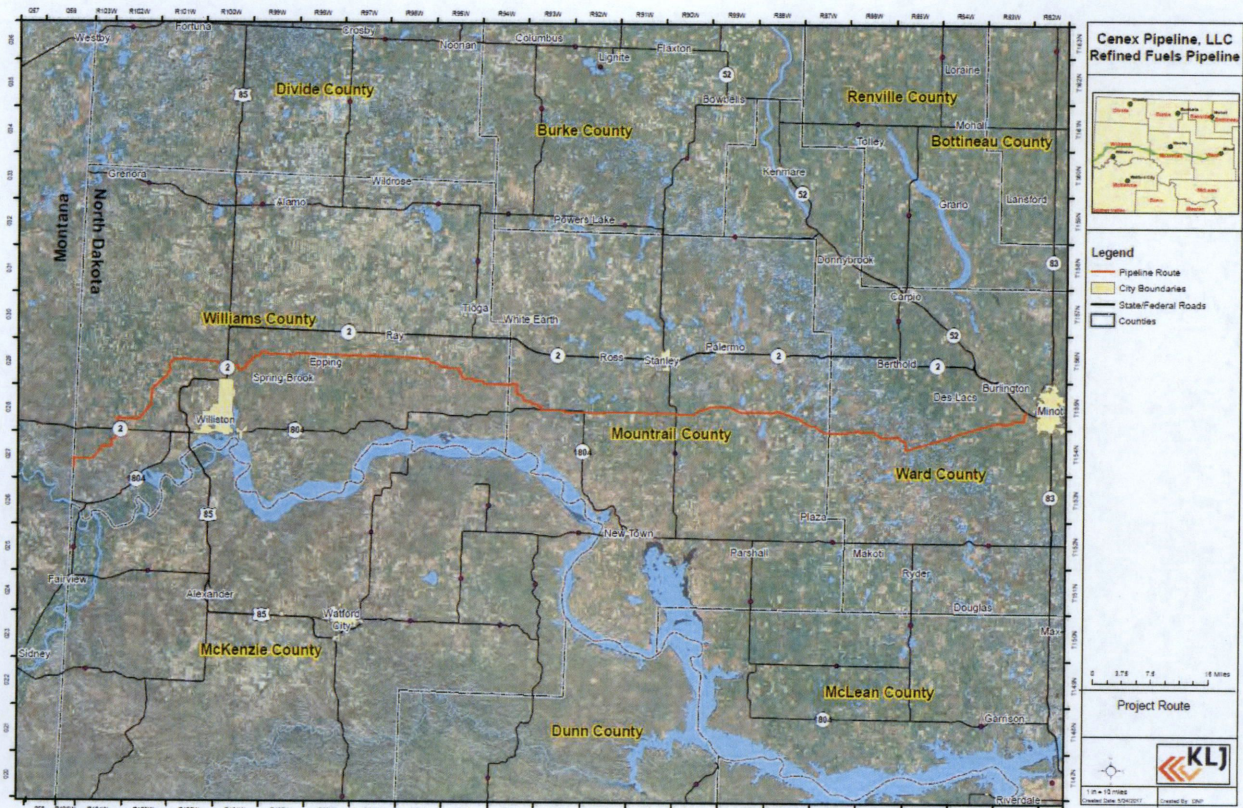


Figure 1, Location Map



III. METHODS

During 2016 and 2017, KLJ conducted Dakota skipper habitat surveys within the entire study area in Mountrail and Ward Counties where landowner permissions were granted. Potential Dakota skipper habitat was delineated if it visually met the Dakota skipper habitat descriptions in the US Fish and Wildlife Service's Section 7 Guidance (May 2016), and the boundaries were recorded using sub-meter accuracy GPS equipment. An area is considered to have Dakota skipper habitat if preferred grasses or forbs are present. Preferred vegetation is generally supported by specific soils; therefore, soil types can also be used in identifying potential Dakota skipper habitat. The following parameters used to determine potential Dakota skipper habitat are summarized below:

A. Vegetation

- ◆ Frequency – All plant species were recorded within a one-tenth meter plot, placed every ten feet, along a 100-foot transect. A GPS point was taken at each plot of each transect. If the site contained grass and forb species preferred by the Dakota skipper in 50 percent or more of the surveyed frequency plots, it met the criteria for having potential Dakota skipper habitat.
- ◆ Cover – The percent cover was visually estimated for plant species present throughout the plant community in which each transect was taken. Any species in the plant community that were not present within the frequency plots but were in the plant community were allotted a cover percentage. Grasses and grass-like species were individually assigned a cover percentage, while forb and shrub species were visually estimated as a group. If one or more of the dominant plant species (those having a minimum 25% cover) was a grass preferred by the Dakota skipper, the site met the criteria for being potential habitat.

B. Soil

- ◆ Sandy loams and loamy sands are generally characterized with preferred Dakota skipper forbs and grasses. Although soils typically are not a focus of the delineations, the soil type can be a key characteristic of Dakota skipper habitat.

Dakota skippers are generally found in two different types of habitat. 'Type A' habitat is found in fairly flat, damp bluestem prairies. Three characteristic flowers that are usually found in this habitat include wood lilies (*Lilium philadelphicum*), harebells (*Campanula rotundifolia*), and smooth camass (*Zygadenus elegans*). 'Type B' habitat, which is more common in western North Dakota, is a dry upland prairie, comprised of rolling hills and ridges. The characteristic grass and forb species includes, big bluestem (*Andropogon gerardii*) and little bluestem (*Schizachyrium scoparium*), needlegrass (*Stipa sp.*), pale purple coneflower (*Echinacea pallida*), upright coneflower (*Ratibida columnifera*), and blanketflower (*Gaillardia sp.*). Once these habitats have been converted from native prairie, it is very unlikely that Dakota skipper habitat would be reestablished. Please refer to **Table 1, Common Grasses and Forbs of**



Dakota Skipper Habitat, for view grasses and forbs that are typically found within Dakota skipper habitat.

Table 1, Common Grasses and Forbs of Dakota Skipper Habitat

Habitat Type	Common Name	Scientific Name
Type A	Prairie Lily	<i>Lilium philadelphicum</i>
Type A	Bluebell Bellflowers	<i>Campanula rotundifolia</i>
Type A	Smooth Camas	<i>Zigadenus elegans</i>
Type A	Rocky Mt. Blazing Star	<i>Liatris ligulistylis</i>
Type A	Canada Goldenrod	<i>Solidago canadensis</i>
Type A	Strict Blue-eyed Grass	<i>Sisyrinchium montanum</i>
Type A	Common Goldstar	<i>Hypoxis hirsuta</i>
Type A	Black-eyed Susan	<i>Rudbeckia hirta</i>
Type A	Stiff Sunflower	<i>Helianthus pauciflorus</i>
Type A	Candle Anemone	<i>Anemone cylindrica</i>
Type A	Big bluestem	<i>Andropogon gerardii</i>
Type A	Little Bluestem	<i>Schizachyrium scoparium</i>
Type A	Indiangrass	<i>Sorhastrum nutans</i>
Type B	Prairie Lily	<i>Lilium philadelphicum</i>
Type B	Purple Coneflower	<i>Echinacea pallida</i>
Type B	Upright Prairie Coneflower	<i>Ratibida columnifera</i>
Type B	Blanketflower	<i>Gaillardia aristata</i>
Type B	Bluebell Bellflowers	<i>Campanula rotundifolia</i>
Type B	White Prairie Clover	<i>Dalea candida</i>
Type B	Purple Prairie Clover	<i>Dalea purpurea</i>
Type B	Kentucky Bluegrass	<i>Poa pratensis</i>
Type B	Big Bluestem	<i>Andropogon gerardii</i>
Type B	Little Bluestem	<i>Schizachyrium scoparium</i>
Type B	Porcupine Grass	<i>Miscanthus sinensis</i>
Type B	Needlegrass	<i>Stipa sp.</i>
Type B	Sideoats Grama	<i>Bouteloua curtipendula</i>
Type B	Prairie Dropseed	<i>Sporobolus heterolepis</i>

***Bolded** species denote characteristic species of Dakota skipper habitat.



IV. EXISTING CONDITIONS

A. Landscape Setting

The study area is located in the ecoregions identified by the USGS as the Northwestern Glaciated Plains, Northwestern Great Plains, and Northern Glaciated Plains of North Dakota. The Northwestern Glaciated Plains ecoregion is typically identified by dark brown soils used for crops and range. The topography of this ecoregion transitions between the generally more level, moister, more agricultural Northern Glaciated Plains to the east and the typically more irregular and drier Northwestern Great Plains to the south. The southern boundary of the Northwestern Glaciated Plains is near the limit of continental glaciation and its soils are derived from glacial drift. The Northwestern Great Plains is largely an unglaciated, semiarid, and rolling plain that is underlain by shale, siltstone, and sandstone. It contains occasional buttes, badlands, ephemeral-intermittent streams, and a few perennial rivers. Low precipitation and high summer evapotranspiration rates restrict groundwater recharge rates. Rangeland is common, but spring wheat and alfalfa farming also occur; agriculture is affected by erratic precipitation and few opportunities for irrigation. Native grasslands persist, especially in areas of steep or broken topography. The Northern Glaciated Plains is composed mainly of glacial drift and is characterized by gently rolling to flat landscape. There is a high concentration of temporary and seasonal wetlands from the subtle rolling topography left from the retreating Wisconsin glaciers that provide valuable waterfowl habitat. This ecoregion has very fertile soil and the native tall and shortgrass prairies have largely been replaced with fields of spring wheat, sunflowers, barley, and alfalfa.

Land use in the 3584-acre study area consists primarily of pasture and tilled cropland. This is an area of oil development along with agricultural activities. Dominant vegetation within the study area is comprised of cultivated agricultural fields where topography allows, and various introduced/native rangelands; along with deciduous and juniper draws.

B. Avoidance Methods

Seventeen areas of potential Dakota skipper habitat were delineated within the study area. Cenex committed to installing a fence providing a 10-foot buffer around all identified potential Dakota skipper habitat within the study area. The fence would act as a barrier protecting the potential habitat from impact by construction equipment while passing through areas within the Right-of-Way (ROW) that will be Horizontally Directionally Drilled (HDD). In addition, Cenex has agreed to place a 50-foot buffer on all proposed habitat for ground clearing activities. In those areas where the 50-foot buffer does not allow sufficient ROW for construction, Cenex will HDD the pipeline and pass machinery through the ROW until on the other side where ground clearing activities can resume. The descriptions below provide information specific to the avoidance plans that have been set in place for each site. For a spatial representation of the delineated potential Dakota skipper habitat sites and for planned construction methods, please refer to **Appendix A, Dakota Skipper Habitat Avoidance Maps**.



a) *Location 1 (Section 17, T155N, R94W)*

Three areas of potential habitat were delineated within Section 17, T155N, R94W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched outside of the 50-foot buffer to the west of the potential Dakota skipper habitat sites, and no equipment will need to pass within the 50-foot buffer.

b) *Location 2 (Section 17, T155N, R94W)*

Three areas of potential habitat were delineated within Section 17, T155N, R94W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched in a necked down right-of way in an open space between two of the sites and to the west of the third potential Dakota skipper habitat site. No equipment will need to pass within the 50-foot buffer.

c) *Location 3 (Section 20, T155N, R94W)*

Three areas of potential habitat were delineated within Section 20, T155N, R94W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched in a necked down right-of-way in an open space between all three of the potential Dakota skipper habitat sites. No equipment will need to pass within the 50-foot buffer.

d) *Location 4 (Section 21, T155N, R94W)*

Three areas of potential habitat were delineated within Section 21, T155N, R94W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched to the north of the first and second sites. The pipeline will HDD under the 50-foot no ground clearing activities buffer of the eastern most site. Due to constraints near the eastern most site, equipment will cross a small portion of the 50-foot buffer of the eastern most site during construction; however, no ground disturbance will occur within the 50-foot buffer and the potential Dakota skipper habitat within the fence will not be impacted.

e) *Location 5 (Section 27, T155N, R94W)*

One area of potential habitat was delineated within Section 27, T155N, R94W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched to the northeast of the potential Dakota skipper habitat site and no equipment will need to pass within the 50-foot buffer.



f) Location 6 (Section 32, T155N, R93W)

Two areas of potential habitat were delineated within Section 32, T155N, R93W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. Equipment will cross a small portion of the 50-foot buffer in between both sites during construction; however, no ground disturbance will occur within the 50-foot buffer and the potential Dakota skipper habitat within the fence will not be impacted. The pipeline will be HDD under the 50-foot no ground clearing activities buffer between the two sites. No impacts are anticipated within any of the buffers.

g) Location 7 (Section 26, T155N, R92W)

One area of potential habitat was delineated within Section 26, T155N, R92W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched to the south of the potential Dakota skipper habitat site, and no equipment will need to pass within the 50-foot buffer.

h) Location 8 (Section 30, T155N, R89W)

One area of potential habitat was delineated within Section 30, T155N, R89W. The habitat will be surrounded by a 10-foot buffer of protective fencing. In addition, no ground disturbance will be allowed within a 50-foot buffer surrounding the potential habitat. The pipeline will be open trenched to the north of the potential Dakota skipper habitat site and no equipment will need to pass within the 50-foot buffer.

V. CONCLUSION

Seventeen potential Dakota skipper habitat sites (approximately 2.48 acres) were delineated within the 3584-acre study area. All sites will be surrounded by a protective fence providing a 10-foot buffer and a 50-foot no ground clearing activities buffer will be incorporated into project plans to minimize potential for construction impacts. No Dakota skipper were observed during the time of the surveys and construction of the proposed project is not anticipated to have any negative impacts on the species due to the commitment made by Cenex at the PSC Public Hearing to avoid impacts to habitat.



VI. REFERENCES

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- US Fish and Wildlife Service, Regions 3 and 6. 2016. Guidance for interagency cooperation under Section 7(a)(2) of the Endangered Species Act for the Dakota skipper, Dakota skipper critical habitat, and Poweshiek skipperling critical habitat. <https://www.fws.gov/midwest/endangered/insects/dask/pdf/DakotaSkipperS7GuidanceV1.1.pdf>
- US Fish and Wildlife Service. 2016. Information for planning and conservation. <<https://ecos.fws.gov/ipac/>>





Appendix A

Dakota Skipper Habitat

Avoidance Maps



R94W

T155N

T155N






Mountrail County

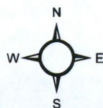
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Dakota Skipper Avoidance Strategy Location 1

Key

-  No Ground Clearing Activities
-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat



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R94W

T155N

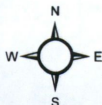
T155N

Mountrail County

17








Dakota Skipper Avoidance Strategy Location 2



0 100 200 Feet

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Key

-  No Ground Clearing Activities
-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat

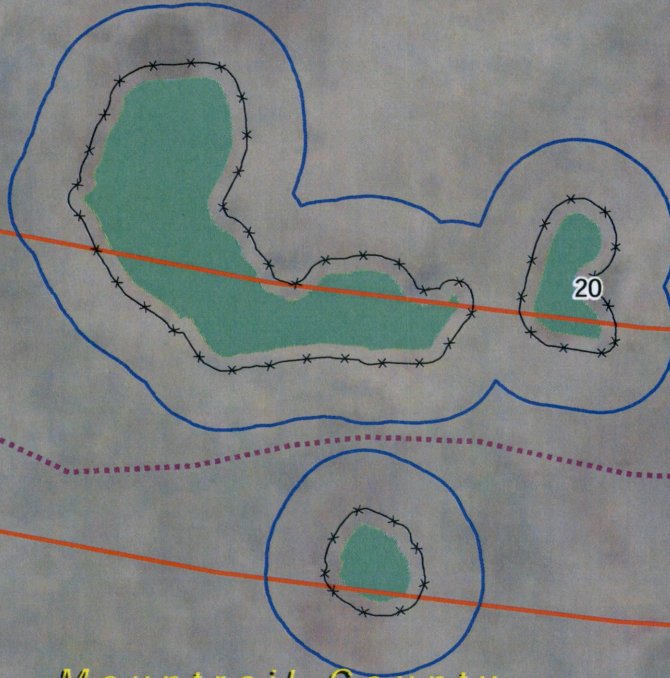
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R94W

T155N

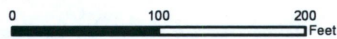
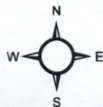
T155N



Mountrail County








Dakota Skipper Avoidance Strategy Location 3



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Key

-  No Ground Clearing Activities
-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat

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R94W

21

28

T155N

T155N

Mountrail County










Dakota Skipper Avoidance Strategy Location 4



0 100 200 Feet

1:4,000

Key

-  No Ground Clearing Activities
-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat
-  Bore
-  Equip. Travel Route

KLJ Project Number: 1716101
Date Created: 9/14/2017 Created By: DNP

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R94W

T155N

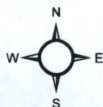
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Mountrail County

27








Dakota Skipper Avoidance Strategy Location 5



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Key

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-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat

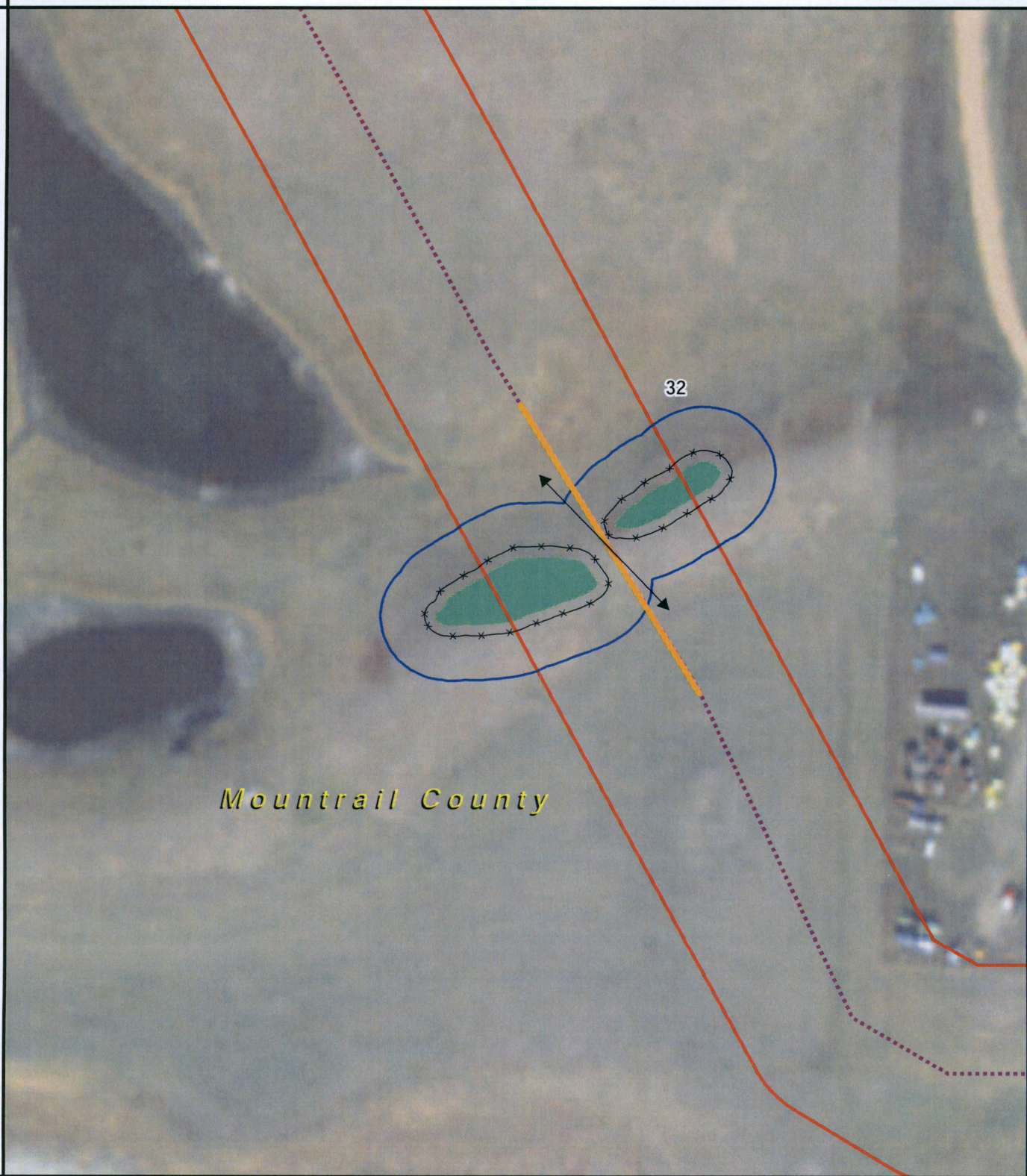
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R93W

T155N

T155N



Mountrail County



Dakota Skipper Avoidance Strategy Location 6



1:1,500

Key

- No Ground Clearing Activities
- Protective Fencing
- Open Trench Pipeline
- Study Corridor
- Potential Dakota Skipper Habitat
- Bore
- Equip. Travel Route

KLJ Project Number: 1716101
 Date Created: 9/14/2017 Created By: DNP

R92W

26

Mountrail County

T155N






T155N

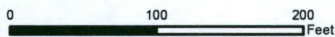
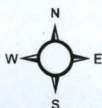
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Dakota Skipper Avoidance Strategy Location 7

Key

-  No Ground Clearing Activities
-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat



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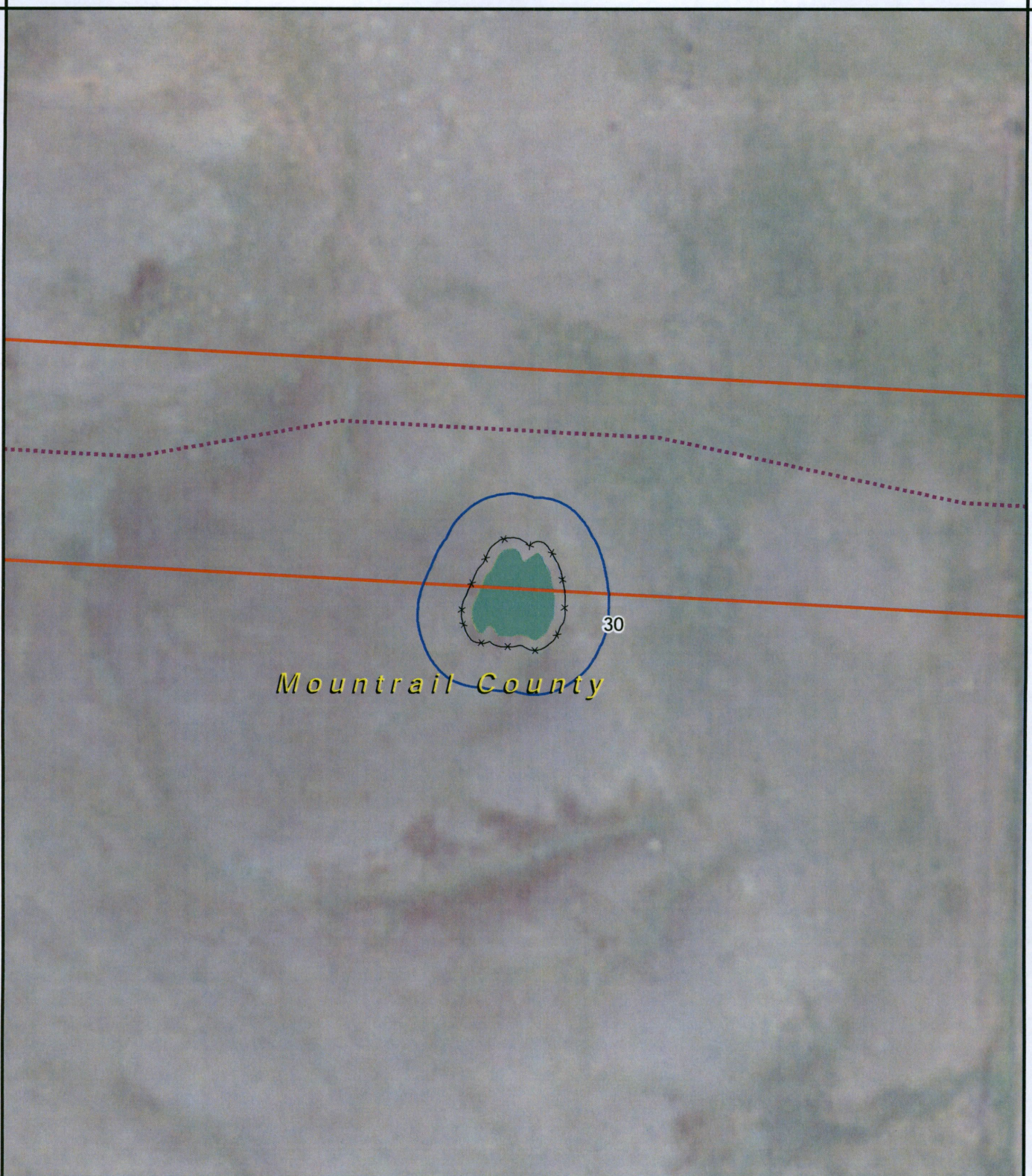
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R89W

T155N

T155N

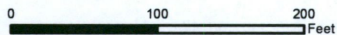
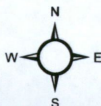


Mountrail County

30








Dakota Skipper Avoidance Strategy Location 8



1:1,500

Key

-  No Ground Clearing Activities
-  Protective Fencing
-  Open Trench Pipeline
-  Study Corridor
-  Potential Dakota Skipper Habitat

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