ENVIRONMENTAL ASSESSMENT DOCUMENT

BNSF USFWS Easement Exchange for Glasgow Double-Track Project
Mountrail, Ward, and Sheridan Counties, North Dakota

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1 INTRODUCTION

1.1 BACKGROUND OF ISSUE

1.1.1 HISTORY OF THE ISSUE

BNSF Railway Company (BNSF) planned a construction project (Project) on the railroad system west of Minot, North Dakota. The project included installation of an additional set of tracks (double track) on part of the Glasgow Subdivision and involved construction activities within and outside of existing railroad right-of-way. After consulting with the United States Army Corps of Engineers (USACE) and receiving a determination that wetlands that are the subject of this Environmental Assessment (EA) were not jurisdictional (NWO-2012-0371-BIS: 8-12-2012 and 11-5-2013; NWO-2013-1344-BIS: 9-4-2013), BNSF obtained construction rights from adjacent landowners so the project through the subject-area could begin. Easements limiting construction were not disclosed by the conveying landowners. The easements at issue came to light after local USFWS personnel contacted BNSF regarding USFWS easements. After completing site visits to evaluate the extent of wetland and grassland parcels affected by BNSF construction and property acquisition in the area, USFWS calculated easements encumbering approximately 7.46 acres of wetland basins and 2.62 acres of grassland-wetland complex as now part of the railroad right-of-way or otherwise impacted by the Project.

1.1.2 USFWS EASEMENT PROGRAM IN NORTH DAKOTA

There are two types of USFWS Easement lands impacted by the project in North Dakota, as described in the publication *US Fish and Wildlife Service in North Dakota* (December 2014, pp. 38):

Wetland Easement: A wetland easement is a legal agreement between the U.S. Fish and Wildlife Service and a private landowner. The landowner received a one-time payment to permanently protect wetlands. Wetlands covered by an easement cannot be drained, filled, leveled, or burned. When these wetlands dry up naturally, they can be farmed, grazed or hayed.

Grassland Easement: A grassland easement is a legal agreement between the USFWS and a private landowner. The landowner receives a one-time payment to permanently keep the land in grass. Land covered by a grassland easement may not be cultivated. Mowing, haying, and grass seed harvesting are delayed until after July 15 in order to help grassland nesting birds complete their nesting before the grass is disturbed. Livestock grazing is not restricted in any way.

1.2 SITE DESCRIPTION

The impacted sites are located in the Prairie Pothole Region, on the eastern edge of the Northern Missouri Coteau in the Northwestern Glaciated Plains Ecoregion (Figure 1). This region is characterized by glacial geomorphology with rolling hills and numerous pothole wetlands (Bryce et al. 1998). The state of North Dakota and federal agencies have acquired many fee-title and easement sites in this area for conservation and protection of these important habitats. Generally, this area is rural, with low residential densities, few towns, and mostly agricultural land use, both cultivated land and grazing. The sites are located along the railroad, but otherwise are fairly remote within the USFWS easement lands.
Figure 1: Locations of BNSF acquired easement sites along railroad and proposed exchange sites with shaded regions showing the physiographic regions.
Easement areas in Ward and Mountrail Counties, consisting of a total of seventeen wetland basins and one grassland-wetland complex (including one wetland basin) were identified as encumbered by the acquired BNSF right-of-way or affected by construction activities (wetland drainage) (Table 1, Figure 1, Appendix A Impacted site maps). The wetlands are pothole habitats with seasonally-to-permanently flooding characteristics located in the Lostwood and Audubon Wetland Management Districts (WMDs), while the grasslands are likely shortgrass prairie (also in Lostwood WMD). The wetland sites were determined non-jurisdictional by the USACE, meaning they are not connected to other waterbodies or systems via surface water drainage.

Table 1: General description of the impacted USFWS easement areas.

<table>
<thead>
<tr>
<th>USFWS Wetland Management District</th>
<th>Owner</th>
<th>Location</th>
<th>Acres, type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lostwood</td>
<td>Nichols</td>
<td>T156N, R90W, S14</td>
<td>2.62 grassland-wetland complex</td>
</tr>
<tr>
<td></td>
<td>Bolles</td>
<td>T156N, R90W, S17</td>
<td>0.39 wetland</td>
</tr>
<tr>
<td></td>
<td>Brown</td>
<td>T156N, R89W, S17</td>
<td>1.09 wetland</td>
</tr>
<tr>
<td></td>
<td>Brown Grain &amp; Cattle</td>
<td>T156N, R88W, S15</td>
<td>0.48 wetland</td>
</tr>
<tr>
<td></td>
<td>Bjelland</td>
<td>T156N, R88W, S11</td>
<td>0.75 wetland</td>
</tr>
<tr>
<td></td>
<td>Depute</td>
<td>T156N, R87W, S24</td>
<td>1.38 wetland</td>
</tr>
<tr>
<td>Audubon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>total grassland-wetland complex acres</td>
<td>2.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td>total wetland acres</td>
<td>7.46</td>
</tr>
</tbody>
</table>

Because of this USACE non-jurisdictional designation, federal permits and cultural assessments of the sites were not required as part of the larger Project. Cultural assessments of nearby jurisdictional wetlands showed no cultural or historical resources, or recommended eligible sites within one mile of the area of potential effects (Palmer and Sabatke 2014a and 2014b). One of the impacted sites and some of the proposed exchange sites fall within this area, but the remainder of the sites are outside the one-mile radius (discussed further in Section 4.5). A finding of “No Historic Properties Affected” has been reached (see Section 4.5 Historical and Cultural Resources).

2 PURPOSE AND NEED STATEMENT

USFWS easement lands are now part of railroad right-of-way and/or were otherwise impacted by the construction of the Glasgow double-track project. The total acreage has been calculated by USFWS as 2.62 acres of grassland easements (which includes 0.81 acres of wetlands) and 7.46 acres of wetland easements. Two requirements exist in order for USFWS to grant an easement exchange: 1) the exchange must be in the interest of the USFWS (habitat equivalence) and 2) the exchange must be based on equal monetary values or equalized by a cash payment. Per USFWS guidance, restored wetlands on or close to impacted areas must be thoroughly investigated and restored if possible in order to satisfy wetland easement impacts/exchange (USFWS 2016). Protection of existing native prairie habitat through the purchase of a new grassland easement is preferred for grassland easement impacts. The USFWS and BNSF
have determined wetland easement losses could be replaced by restoring drained wetlands, placing those
wetlands under USFWS wetland easement, and completing an easement exchange for the lost easement
acres. For grassland easement impacts, BNSF will provide financial compensation toward the purchase of
a grassland easement purchase and an easement exchange will be completed to compensate for the lost
grassland easement acres.

The goal of this Environmental Assessment is to evaluate the divestiture and exchange of USFWS wetland
and grassland easement interests.

3 ALTERNATIVES CONSIDERED

3.1 ALTERNATIVE A - NO ACTION

This is not a true alternative because it does not address the purpose and need in any way. It will be
discussed further in the assessment, however, to demonstrate potential environmental effects if
exchange is not required nor implemented.

3.2 ALTERNATIVE B - EASEMENT LAND EXCHANGE

This alternative entails identification of parcels which would be appropriate for a land exchange. BNSF
would negotiate with the landowner to obtain an easement in the form acceptable to USFWS and fund
agreed-upon restoration work. Assuming willing landowners and suitable replacement properties
identified by USFWS, this alternative works well for wetland sites because restored wetlands have the
capability to resume quality ecosystem function and services within a relatively short time (years to
decades). Unfortunately, grassland sites do not show the same dynamic rehabilitation as wetlands. This
is due to the time required to achieve the highly developed and balanced biotic/abiotic interaction found
in these systems. Once a parcel of natural, undisturbed prairie is compromised, i.e. cultivated, the integrity
of the system is effectively disrupted permanently. Prairies can be restored to some semblance of similar
ecosystem function and service on a superficial level, but to restore these systems back to original
condition would require a duration in the magnitude of centuries. The USFWS is willing to assist with
finding suitable prairie habitats that would qualify for protection and thus targeted for easement
exchange.

Wetland sites: USFWS has examined potential wetland restoration sites and has identified several for
further consideration by BNSF. BNSF has communicated with landowners and determined a subset of
those locations for further consideration based on the currently understood willingness of landowners in
considering the potential transaction. These potential replacement properties are located in Ward,
Sheridan, and Mountrail Counties (Figure 1, Table 2, Appendix B Proposed exchange site maps). According
to design specifications, the estimated wetland area available for possible restoration and replacement is
4.65 acres. These wetlands are a similar habitat to the impacted wetlands, seasonally-to-permanently
flooded potholes. USFWS has also identified potential replacement properties which require no further
restoration work totaling 4.46 acres. In the past these areas were drained wetlands, but the restoration
work is completed. If both categories of wetlands listed above, the already-restored sites and the potential restoration sites (if successfully restored), the easement exchange will result in a net benefit to USFWS.

**Grassland sites**: To achieve adequate land exchange of grassland areas, BNSF will contribute funds toward the purchase of a grassland easement property consisting of native prairie. USFWS will then complete an easement exchange for the impacted grassland easement acres.

**Advantages to USFWS**: The replacement effort would be largely conducted by BNSF, including negotiations with landowners and the uncertainty associated with this process, restoring the wetland areas (design, construction, seeding), and facilitating the land exchange. This alternative is consistent with USFWS easement exchange policy (USFWS 2016). The formal easement exchange will be completed by USFWS realty staff.

**Disadvantages to USFWS**: The timeline of this alternative depends upon the pace of BNSF and landowner coordination, timing of USFWS realty staff, and duration of the restoration activities. Also, the agency will still incur service hours and costs for documenting and processing the easements along with oversight of restoration work.

Table 2: General description of the proposed wetland exchange sites.

<table>
<thead>
<tr>
<th>Site Nickname (township), County</th>
<th>Location</th>
<th>Wetland ID</th>
<th>Estimated pre-restoration acres</th>
<th>Restoration status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passport Township, Ward County</td>
<td>T156N, R87W, S15 NW ¼</td>
<td>1</td>
<td>0.42</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>0.12</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>1.02</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td>T156N, R87W, S10 NW ¼</td>
<td>4</td>
<td>0.45</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>1.50</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>0.14</td>
<td>completed</td>
</tr>
<tr>
<td>Shealy Township, Ward County</td>
<td>T154N, R87W, S25 SW ¾ NW ¼</td>
<td>1</td>
<td>0.38</td>
<td>required</td>
</tr>
<tr>
<td>Martin Township, Sheridan County</td>
<td>T150N, R74W, S16 W ½ NW ¼</td>
<td>1</td>
<td>3.70</td>
<td>completed</td>
</tr>
<tr>
<td>Myrtle Township, Mountrail County</td>
<td>T156N, R94W, S2 E ¾ NE ¼</td>
<td>1</td>
<td>0.50</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>0.26</td>
<td>required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>0.62</td>
<td>completed</td>
</tr>
<tr>
<td>total estimated acres restoration complete</td>
<td></td>
<td></td>
<td>4.46*</td>
<td></td>
</tr>
<tr>
<td>total estimated acres pre-restoration</td>
<td></td>
<td></td>
<td>4.65*</td>
<td></td>
</tr>
<tr>
<td>total estimated potential exchange acres</td>
<td></td>
<td></td>
<td>9.11</td>
<td></td>
</tr>
</tbody>
</table>

*Pre-survey estimate, final values will be established as part of the exchange process*

If some or all of these landowners decline the wetland restoration offer/easement, USFWS will work with BNSF to find additional habitats/landowners that have suitable properties for restoration.
3.3 ALTERNATIVE C – FINANCIAL COMPENSATION FOR BOTH WETLAND AND GRASSLAND EASEMENT EXCHANGE PROPERTIES

This alternative entails financial transfer to compensate for the impacted easement lands. In this case, BNSF would negotiate an amount and pay USFWS or contribute funds toward the purchase of easement properties.

Advantages to USFWS: The agency would then have funds available for strategic and targeted purchase of easement lands, and this option may enable flexibility in location selection. The USFWS could use the funds to augment easement acquisition in already-selected parcels of larger, desirable intact prairie ecosystem. In addition, the funds could be transferred quickly, with no time delay or ongoing coordination required for completion of the agreement.

Disadvantages to USFWS: The alternative is not consistent with current USFWS easement exchange guidance (USFWS 2016). The agency would have funds available, but would have to go through the process of obtaining and securing lands, and restoring the wetlands.

3.4 ALTERNATIVES BROUGHT FORWARD

These alternatives provide a variety of solutions for compensatory action for easement impacts. Table 3 shows a summary of the advantages and disadvantages. Alternative A does not satisfy the purpose and need, but is discussed further to demonstrate the environmental effect of removing the USFWS easement exchange requirement. Alternative B satisfies the need and is the preferred alternative. Alternative C is not suitable because USFWS guidance indicates financial compensation is not an appropriate alternative for easement exchanges. Therefore, Alternative C does not satisfy the purpose and need and will not be further discussed in Section 4.

Table 3: Summary of the alternatives.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>A No action</th>
<th>B Easement land exchange</th>
<th>C Financial compensation for wetland and grassland sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>USFWS preferred option</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Provides exchange for habitat types</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Potential quality of habitat exchange</td>
<td>reduction in area and quality</td>
<td>similar to original</td>
<td>n/a</td>
</tr>
<tr>
<td>Length of time to complete exchange</td>
<td>n/a</td>
<td>uncertain duration</td>
<td>n/a</td>
</tr>
<tr>
<td>Enables strategic placement of exchange easements</td>
<td>n/a</td>
<td>yes</td>
<td>n/a</td>
</tr>
</tbody>
</table>
4 AFFECTED ENVIRONMENT AND CONSEQUENCES

In this environmental assessment, the individual impacts were compared between the baseline of the original easement sites and the sites under consideration for exchange or, alternatively, the acquisition of comparable sites by USFWS.

4.1 PHYSICAL ENVIRONMENT

4.1.1 GEOLOGY AND SOILS

The region of North Dakota in which the original and potential exchange sites are located is the Missouri Coteau, just west of the escarpment that slopes down to Minot (Figure 1). This area is part of the Northwestern Glaciated Plains Ecoregion. The region marks the western extent of glaciation and is dominated by glacial moraines, erosional features, and pothole wetlands (Bryce et al. 1998). The mosaic of soil types in this area show the highly variable condition of surface soils, but the dominant soils are Zahl-Williams loams (9-15% slopes), Zahl-Max-Parnell complex (35 % slopes), and Zahl-Williams-Bowbells loams (3-9% slopes) (NRCS 2017).

4.1.1.1 ALTERNATIVE A

This alternative will result in loss of wetland and grassland conservation sites and net reduction in soil health and habitat.

4.1.1.2 ALTERNATIVE B

This alternative will result in replacement of wetland and grassland easement sites.

4.1.2 WATER QUALITY / WATER RESOURCES

Grassland easements decrease runoff velocities after precipitation events and thus reduce erosion and sediment transport into streams and rivers. Wetlands also provide these ecosystem services by enhancing phytostabilization of sediments and soils. The general physiography of the Coteau reduces the likelihood of much sediment transport because of the lack of streams and rivers in the region.

4.1.2.1 ALTERNATIVE A

This alternative will result in an outcome similar to that of the original easement properties. The grassland areas and the wetlands affected by the construction were not connected by runoff or surface flow to any larger water bodies or riparian systems (deemed non-jurisdictional by the USACE).

4.1.2.2 ALTERNATIVE B

The sites selected for the land exchange will show a similar benefit to water resources quality (erosion).
4.1.3 HYDROLOGY AND FLOODPLAINS

Federal agencies must act to avoid/minimize modifications to floodplains (Executive Order 11988), specifically the FEMA-designated 100-year flooding zone. These are shown on the Flood Insurance Rate Maps (FIRM) regarding communities within the National Flood Insurance Program (NFIP). The impacted acres are not located in or near a floodplain, and the potential exchange sites likely will not be located in floodplains. There will be no construction of structures subject to flood insurance or impacts to floodplains.

4.1.3.1 ALTERNATIVE A

Because the impacted sites were in rural areas, there will be no net effect of this alternative.

4.1.3.2 ALTERNATIVE B

The land exchange sites are not likely to be located in or near participating communities, thus not subject to the 100-year floodplain regulation. There will be no net effect of this alternative.

4.2 BIOLOGICAL RESOURCES

4.2.1 WETLANDS

Under the Clean Water Act, jurisdictional wetlands may be protected if a project has permanent impacts upon these habitats. The wetlands that were indeed impacted during the railway project were not jurisdictional according to the USACE, but were protected habitats under the USFWS easement program. As a result of the railway project 7.46 acres of wetland habitat were impacted permanently.

4.2.1.1 ALTERNATIVE A

This alternative will result in loss of 7.46 acres of wetland easement land, thus further increasing the number and area of wetlands lost to human activity.

4.2.1.2 ALTERNATIVE B

This alternative would result in similar or greater area of potential wetland and grassland habitat.

4.2.2 THREATENED OR ENDANGERED SPECIES AND CRITICAL HABITAT

The actions of federal agencies are tasked, through the Endangered Species Act (1973), to determine the effects on threatened and endangered species of animals, plants, and their habitats. Ward and Mountrail Counties list the following species: interior least tern (Mountrail County only), whooping crane, pallid sturgeon, gray wolf (all endangered), piping plover, Dakota skipper, rufa red knot, Northern long-eared bat (all threatened), and Sprague’s pipit (candidate species), with the critical habitat of the piping plover designated (Appendix C USFWS Threatened and Endangered Species List by County, 2015). Several of these species would not be found at the original easement sites, and likely not at the exchange sites,
because of lack of habitat (bat, plover, sturgeon, red knot). The cranes and wolves may not have frequented the original sites due to disturbance from trains.

4.2.2.1 ALTERNATIVE A
Potential for lost wetland ecosystems and grassland habitat for Dakota skipper and Sprague’s pipit.

4.2.2.2 ALTERNATIVE B
This alternative would result in similar potential habitat for species.

4.2.3 TERRESTRIAL AND AQUATIC ENVIRONMENT
During the construction of the railway, 2.62 acres of grassland-wetland complex easement habitat were permanently impacted. The acres were part of a larger, continuous grassland community located in a rural area. There are no riparian environments in either the area of the impacted acres nor in the potential exchange sites.

4.2.3.1 ALTERNATIVE A
This alternative would result in loss of 2.62 acres of grassland-wetland complex conservation habitat.

4.2.3.2 ALTERNATIVE B
This alternative would result in similar acreage of wetland and grassland habitat.

4.3 HAZARDOUS MATERIALS AND WASTES
Hazardous materials and wastes may or may not be present in the areas where the land exchange will occur. It is not likely, however, because the sites are rural and not in proximity to population centers or industrial sites.

4.3.1.1 ALTERNATIVES A AND B
There will be no net effect from these alternatives.

4.4 SOCIOECONOMIC ISSUES

4.4.1 NOISE
The impacted easement sites are located in rural areas far away from human populations, as are the potential exchange sites.

4.4.1.1 ALTERNATIVE A
There will be no net effect from this alternative.
4.4.1.2 ALTERNATIVE B

There will be temporary, but minimal, noise impact from the construction activity for wetland restoration.

4.4.2 ZONING AND LAND USE

The land use in the impacted sites is rural, generally agricultural, with the railway present. The easement program in North Dakota promotes conservation of grassland and wetland habitat by restricting many destructive agricultural practices including wetland drainage and grassland tillage. The easement sites impacted by the railway project included grassland and wetland habitat.

4.4.2.1 ALTERNATIVE A

This alternative would result in loss of conservation land.

4.4.2.2 ALTERNATIVE B

There will be no net effect from this alternative.

4.4.3 TRAFFIC AND TRANSPORTATION

The impacted easement sites are located in rural areas far away from human populations, as are the potential exchange sites.

4.4.3.1 ALTERNATIVES A AND B

There will be no net effect of construction activities resulting from these alternatives.

4.4.4 PUBLIC HEALTH AND SAFETY

The impacted easement sites are located in rural areas far away from human populations, as are the potential exchange sites.

4.4.4.1 ALTERNATIVES A AND B

There will be no net effect of construction activities resulting from these alternatives.

4.4.5 AESTHETICS AND VISUAL RESOURCES

The impacted easement sites are located in rural areas far away from human populations, as are the potential exchange sites.

4.4.5.1 ALTERNATIVES A AND B

There will be no net effect of construction activities resulting from these alternatives.
4.4.6 PUBLIC SERVICES AND UTILITIES

The impacted easement sites are located in rural areas far away from human populations, as are the potential exchange sites.

4.4.6.1 ALTERNATIVES A AND B

There will be no net effect of construction activities resulting from these alternatives.

4.4.7 ENVIRONMENTAL JUSTICE

The impacted easement sites are located in rural areas far away from human populations, as are the potential exchange sites.

4.4.7.1 ALTERNATIVES A AND B

There will be no net effect of construction activities resulting from these alternatives.

4.5 HISTORIC AND CULTURAL RESOURCES

Because the wetlands at issue here were deemed non-jurisdictional (USACE), no site-specific cultural resources inventory was required for the permitting process. Two cultural assessments were done nearby, however, for other railway projects (Palmer and Sabatke 2014a and 2014b) and associated reports have been provided for further review by USFWS archaeologists. The results of these analyses are “No Historic Properties Affected,” and SHPO has reported a decision of concurrence with the findings of the report on May 17, 2014 (Appendix D – SHPO Concurrence Letter).

4.5.1.1 ALTERNATIVE A

There will be no net effect from this alternative.

4.5.1.2 ALTERNATIVE B

Designation of wetlands and grasslands for USFWS easement status would preclude further land disturbance and development, thus protecting any known or unknown cultural or historic sites in the area.

4.6 CUMULATIVE IMPACTS

Removing land from intensive agriculture and placing these acres under USFWS designation results in positive impact on wetland and grassland conservation. In this environmental assessment, the individual impacts were compared between the baseline of the original easement sites and the sites under consideration for exchange (Table 4). The environmental impacts and consequences are roughly equivalent between the original sites and exchange sites. The no-action alternative would result in significant negative impacts.
4.6.1.1 ALTERNATIVE A
Negative impacts from loss of wetland and grassland conservation sites.

4.6.1.2 ALTERNATIVE B
Replacement/conservation of wetland and grassland sites.

5 IMPACT SUMMARY MATRIX

Table 4: Impact summary for the alternatives

<table>
<thead>
<tr>
<th>Description of alternative</th>
<th>A: No-action</th>
<th>B: Easement Land exchange</th>
<th>C: Financial compensation for wetland and grassland sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology &amp; soils</td>
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<td>loss of wetland and grassland habitat</td>
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</table>
6 REFERENCES


7 DOCUMENT PREPARED BY:

Donna Jacob PhD, PWS, CWD; Houston Engineering, Inc.
Appendix A

Impacted Site Maps
Lostwood Wetland Management District
Wetland Easement
Mountrail County 304X
T156N., R88W., Section 15
Project: BNSF Double Track Railroad Construction
Property: Brown Grain and Cattle
Lostwood Wetland Management District
Wetland Easement
Mountralf County 20X,1
T156N., R88W., Section 18
Project: BNSF Double Track Railroad Construction
Property: Swenningson
Lostwood Wetland Management District
Wetland & Grassland Easement
Mountrail County 503X,1,2 & 503G,1,2
T156N,32X R90W., Section 14
Project: BNSF Double Track Railroad Construction
Property: Jerold Nichols
Lostwood Wetland Management District
Wetland Easement
Mountrail County 181X
T156N., R90W., Section 17
Project: BNSF Double Track Railroad Construction
Property: Bolles
Appendix B

Proposed Easement Exchange Site Maps
DRAINAGE FACILITY MAP

Birdsall, Leon
WATERFOWL PRODUCTION AREA
TRACT (235x)

289.14 ACRES

Ward COUNTY

EASEMENT AUTHORIZED BY MIGRATORY BIRD HUNTING STAMP ACT OF MARCH 16, 1934, AS AMENDED

DESCRIPTION:

T. 156 N., R. 87 W.

section 10: SW1/4

section 15: NW1/4 less G.N.R.R. r/o /10 recorded B.7 P.248 and B.243 P.463 and as it presently exists, and less highway r/o /w

recorded B.69 m P. 233.

I hereby certify that this map represents the excepted drainage ditches and/or deleted wetlands referred to in the easement agreement executed 10/26/66 and accepted on______.

DEC 1-6 1966

Regional Director

Wetlands Deleted from the Provisions of the Easement

Wetlands Drained

Open Ditch

Scale - 4" = 1 mile

Map drawn by: R.A.H. Date: 11/21/66
0.14 ACRE

1.50 ACRE

2227

2226.5

2227.5

2227

2226.5

2227.5

20' x 60'

DITCH PLUG

ELEV. 2226.67

SW/4

SECTION 10

TOWNSHIP 156N

RANGE 87W

H:\Fargo\JBN\8000\8031\13_8031_001\Phase 115 - Mark Birdsall Sec 15-156-87\CAD\Xrefs_Surfaces\Xref_Points_Linework_Phase115.dwg-AREA 31-6/11/2015 1:14 PM-(sthomasson)

Houston Engineering Inc.
P: 701.237.5065

Fargo
F: 701.237.5101

PROJECT NO.

SHEET MARK BIRDSALL

PART OF THE SW1/4, SEC. 10 TWP 156N RGE 87W

WARD COUNTY, NORTH DAKOTA

USFW WETLANDS SURVEY

8031-001

Drawn by

Checked by

Date

6-4-15

JTK

AS SHOWN

1 of 4
PART OF THE NW1/4, SEC. 15 TWP 156N RGE 87W
WARD COUNTY, NORTH DAKOTA

MARK BIRDSALL
PART OF THE NW1/4, SEC. 15 TWP 156N RGE 87W
WARD COUNTY, NORTH DAKOTA

0.42 ACRE

SMH 6-4-15
AS SHOWN

SCALE
0 804040 Feet

SMH
6-4-15

Drawn by

Checked by

Date

4 4

PROJECT NO.
8031-001

USFWS WETLANDS SURVEY

4 of 4

SHEET
DRAINAGE FACILITY MAP

Myers, Ray

WATERFOWL PRODUCTION AREA

TRACT (33X)

WARD

COUNTY: North Dakota

EASEMENT AUTHORIZED BY MIGRATORY BIRD HUNTING STAMP ACT OF MARCH 16, 1934, AS AMENDED

DESCRIPTION:

T. 154 N., R. 87 W.

section 25: N4SW1, SW2NW1, NW2S.

An exact duplicate of the map was mailed on 5/20/69 to Dr. Ray Myers.

I hereby certify that this map represents the excepted drainage ditches and/or deleted wetlands referred to in the easement agreement executed 5/20/69 and accepted on JUL 15 1969

Regional Director R. W. Burwell

D Wetlands Deleted from the Provisions of the Easement

- Open Ditch

Scale - 4" = 1 mile

Map drawn by: DJF Date: 5/23/69
0.38 ACRE

25' X 40'

DITCH PLUG

ELEV. 2069.12

SW1/4

TOWNSHIP 154N

RANGE 87W

SECTION 25

FeetScale

0

402020

By

Date

Revision No.

H:\Fargo\JBN\8000\8031\13_8031_001\Phase 131-USFWS Myers\CAD\Xrefs_Data\Xref_Points_Linework_Phase131.dwg-Layout1-6/11/2015 1:13 PM-(sthomasson)

Houston

Engineering Inc.

P: 701.237.5065

F: 701.237.5101

Scale

Drawn by

Date

Checked by

Date

PROJECT NO.

SHEET

MARLIN MEYERS

PART OF THE SW1/4, SEC. 25 TWP 154N RGE 87W

WARD COUNTY, NORTH DAKOTA

USFW

WETLANDS SURVEY

8031-001

AS SHOWN

1 1
DRAINAGE FACILITY MAP

Burbidge, R. O.

TRACT 174X-2

WATERFOWL PRODUCTION AREA

Hountrail COUNTY

EASEMENT AUTHORIZED BY MIGRATORY BIRD HUNTING STAMP ACT OF MARCH 16, 1934, AS AMENDED

DESCRIPTION:

T. 156 N., R. 94 W.


LOT TABLE

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<td>Lot 4</td>
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</table>

I hereby certify that this map represents the excepted drainage ditches and/or deleted wetlands referred to in the easement agreement executed 6/23/65.

and accepted on ____________.

W. A. Schaff

Acting Regional Director

Wetlands Deleted from the Provisions of the Easement

Wetlands Drained

Open Ditch

Scale - 4 in. 1 mile

Map drawn by: J.T.S. Date: 7/30/65
0.50 ACRE

20' X 50'
DITCH PLUG
ELEV. 2234.93

GO V T LOT 1

SECTION 2
TOWNSHIP 156N
RANGE 94W

SCALE

By
Date
Revision No.

Houston Engineering Inc.
P: 701.237.5065
F: 701.237.5101

MOUNTAIL COUNTY, NORTH DAKOTA

USFW WETLAND SURVEY

PROJECT NO. 8031-001

SHEET 2 of 3
Appendix C

Threatened and Endangered Species List
## County Occurrence of Endangered, Threatened, Proposed and Candidate Species
and Designated Critical Habitat in North Dakota

**October 2015**

| Species                                | M | M | M | M | M | M | N | O | P | R | R | R | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S | S |
| Interior Least Tern - E                | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Whooping Crane - E                     | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Black-footed Ferret - E               | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Pallid Sturgeon - E                   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Gray Wolf - E                         | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Poweshiek Skipperling - E             | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Piping Plover - T                     | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Western Prairie Fringed Orchid - T    | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Dakota Skipper - T                    | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Rufa Red Knot - T                     | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Northern Long-Eared Bat - T          | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Sprague’s Pipit - C                   | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

### Critical Habitat

|                          | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Piping Plover - D        | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Dakota Skipper – D       | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Poweshiek Skipperling – D| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

**Legend:**
- **E** – Endangered
- **T** – Threatened
- **P** – Proposed
- **C** – Candidate
- **D** - Designated
Appendix D

ND SHPO Concurrence
FYI

This should take care of the cultural requirements for the exchange for the BNSF double track project. Once the EA revisions are complete, we should be able to move this project into the public comment portion of the EA. Thanks,

Jon Beyer
Wetland District Manager/Federal Wildlife Officer
Audubon National Wildlife Refuge
3275 11th St NW
Coleharbor, ND  58531
Phone: 701-442-5474 ext 116

Begin forwarded message:

From: "Springer, Karri" <karri_springer@fws.gov>
Date: April 7, 2017 at 11:03:13 AM CDT
To: "Beyer, Jonathan" <jonathan_beyer@fws.gov>
Subject: BNSF RR Glasgow Subdivision Segments 4 & 5 - Easement Exchange and Wetland Restorations Project [FRED#: 17.ND.ADB.004]

Hi Jon,

Attached is the SHPO concurrence letter for the BNSF RR Glasgow Subdivision Segments 4 & 5 - Easement Exchange and Wetland Restorations Project. I recommend that the project proceed as planned. Feel free to contact me with any questions or comments.

Have a good day,

Karri

Karri L. Springer
ND/SD Zone Archeologist
Bismarck Field Office
US Fish and Wildlife Service
3425 Miriam Avenue
Bismarck, ND  58501
Phone:  701-355-8577
Mobile:  720-556-3844
karri_springer@fws.gov
Mr. Matthew J. Mikulecky  
Project Manager  
US Army Corps of Engineers  
North Dakota Regulatory Office  
1513 South 12th Street  
Bismarck, North Dakota 58504  

NDSHPo REF.: 14-1018a COE “Class III Architectural and Archaeological Resources Inventory for the BNSF Railway Glasgow Subdivision Improvements Segment 4 Project, Ward County, North Dakota”

USACE: 2012-00371-BIS

Dear Matt:

We have received and reviewed correspondence and document for:  
COE 14-1018a “Class III Architectural and Archaeological Resources Inventory for the BNSF Railway Glasgow Subdivision Improvements Segment 4 Project, Ward County, North Dakota,” by HDR and find it acceptable.

We concur with a _No Historic Properties Affected_ determination provided that the project is of the nature stated and it takes place in the plotted location in the COE documentation.

Thank you for the opportunity to review the project. If you have questions please contact either Susan Quinnell at squinnell@nd.gov or (701) 328-3576 or Paul Picha at ppicha@nd.gov or (701) 328-3574. Please include the _NDSHPo REF.: 14-1018a_ in correspondence regarding the project.

Sincerely,

Merlan E. Paaverud, Jr.  
State Historic Preservation Officer (North Dakota) and  
Director, State Historical Society of North Dakota