



Tesoro Logistics GP, LLC
19100 Ridgewood Parkway
San Antonio, TX 78259
210 626 6000

August 12, 2013

Mr. Darrell Nitschke
Executive Director
North Dakota Public Service Commission
600 E. Boulevard Avenue, Dept. 408
Bismarck, NO 58505-0480



RE: Tesoro High Plains Pipeline Company LLC
Certification Letter for Keene#2 Crude Oil Storage Facility, McKenzie County, ND

Dear Sir:

In accordance with North Dakota Century Code 49-22-03(3) (2009), this letter is to notify the North Dakota Public Service Commission (Commission) that Tesoro High Plains Pipeline Company LLC (THPP) intends to install 2 (two) – 150,000 BBL tanks (150 ft. diameter, 48 ft. tall) along with approximately 5 ft. high containment levee, two small booster pumps and up to 3 main line pumps (~700 HP ea) on a site located directly across from Tesoro's existing Keene #1 station along the south side of the County Route 12 (34th St. NW) in McKenzie County, North Dakota (see attached Drawing No. 21235 - Property Map - 2)

The proposed Keene#2 site has an existing THPP crude oil pipeline crossing through the site (see attached Drawing No. 21235 - Property Map - 2). This existing crude oil pipeline is a part of the THPP System, which has been in service since the 1950s. As such, the existing THPP pre-dates North Dakota's Siting Act and thereby proposed project qualifies for construction within the 350 ft. limit from the center line of the existing pipeline through the Certification Process, N.D.C.C. 49-22-03(3)(a) (2009).

Tesoro certifies that this construction project will be restricted to 350 ft. of either side of the existing crude oil pipeline and that it will be within a chain-link fenced area. Tesoro also certifies that there are no residences, schools or businesses located within 500 feet of the facilities to be constructed. Tesoro intends to begin earthwork and installation of concrete foundations for these new facilities in October 2013.

Also, Tesoro certifies that the construction of these storage facilities will not affect any known exclusion or avoidance areas, as defined in North Dakota Administrative Code 69-06-08-02 (2009). Please refer to the enclosed "Avoidance/Exclusion Area and Resources Analysis" document prepared by SWCA Environmental Consultants dated May 2013. Additionally, Tesoro certifies that it will perform all work on this construction project within the rules and regulations of other agencies that have jurisdiction.

For this project, building construction permits are being obtained from the McKenzie County.

Upon your request Tesoro is willing to have a pre-construction conference regarding this project. Plans currently call for construction activities to begin in October 2013.

Your attention to this matter is greatly appreciated. I can be reached at 210-626-4585 for any questions or further information that may be needed.

Respectfully submitted,

Greg Henderson
Vice President, Logistics Operations
Tesoro Logistics GP LLC

Attachments:

1. Avoidance/Exclusion Areas and Resources Evaluation Report: Keen #2 Crude Oil Storage facility, McKenzie County, North Dakota
2. State Historical Society of North Dakota Concurrence Letter
3. *CERTIFICATION AFFIDAVIT BY TESORO VICE-PRESIDENT.*

Cc: Brian Bjella, Attorney, Crowley Fleck PLLP, Bismarck, ND
Richard Healy, Wood Group Mustang, LP, Birmingham, AL
Divyang Surati, Wood Group Mustang, LP, Houston, TX

CERTIFICATION OF APPLICANT PURSUANT TO
NORTH DAKOTA CENTURY CODE §49-22-03(3)


Tesoro High Plains Pipeline Company, LLC

Case No. _____

The undersigned, Greg Henderson, a duly authorized agent of Tesoro High Plains Pipeline Company, LLC("THPP"), having the authority to act on behalf of and bind THPP, does hereby certify under oath:

1. That THPP owns and operates THPP crude oil pipeline in North Dakota. That the pipeline has been in service since the 1950's, being prior to North Dakota's Siting Act codified in North Dakota Century Code Chapter 49-22.
2. That the construction activities as described in the letter from THPP dated July 16, 2013, shall take place on land owned in fee by THPP, and shall be restricted to 350 feet of either side of the existing THPP crude oil pipeline within the chain-link fenced area.
3. That the construction activity will not affect any known exclusion or avoidance area.
4. That THCC will comply with reasonable requests of the North Dakota Public Service Commission ("PSC") in undertaking such construction activities, and will construct and operate the facility in accordance with any applicable conditions and protections in the Siting Act and PSC rules.

Dated this 30th day of July, 2013.



Greg Henderson
Vice President, Logistics Operations
Tesoro Logistics GP LLC

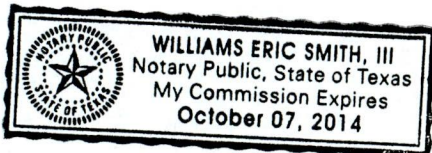
STATE OF TEXAS)

)SS:

COUNTY OF BEXAR)

On this 30th day of July, 2013, before me, a Notary Public for the State of Texas, personally appeared Greg Henderson, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal the date first above written.





Notary Public for the State of TEXAS
My Commission Expires: 10/7/14

**Avoidance/Exclusion Areas and
Resources Evaluation Report:
Keene #2 Crude Oil Storage Facility
McKenzie County, North Dakota**

Prepared for
Wood Group Mustang, Inc.

On Behalf of
Tesoro Logistics LP

Prepared by
SWCA Environmental Consultants

May 2013

**Avoidance/Exclusion Areas and Resources Evaluation Report:
Keene #2 Crude Oil Storage Facility
McKenzie County, North Dakota**

Submitted to
North Dakota Public Service Commission

Prepared for
**Wood Group Mustang, Inc
16001 Park Ten Place,
Houston, TX - 77030**

On Behalf of
**Tesoro Logistic, LP
1900 Ridgewood Parkway
San Antonio, Texas 78259**

Prepared by
**SWCA Environmental Consultants
116 North 4th Street, Suite 200
Bismarck, North Dakota 58501**

May 2013

TABLE OF CONTENTS

	<u>Page</u>
1.0 BACKGROUND AND PROJECT DESCRIPTION	1
2.0 SITE ANALYSIS	1
2.1 Public Services and Infrastructure.....	2
2.2 Demographics.....	3
2.3 Land Use and Land-Based Economics.....	3
2.4 Recreational Resources	4
2.5 Cultural and Archaeological Resources	4
2.6 Soils	4
2.7 Geologic and Groundwater Resources	5
2.8 Surface Water and Floodplain Resources.....	5
2.9 Wetlands.....	6
2.10 Vegetation	6
2.11 Wildlife.....	7
2.11.1 Gray Wolf.....	8
2.11.2 Black-footed Ferret	9
2.11.3 Whooping Crane	9
2.11.4 Piping Plover.....	9
2.11.5 Interior Least Tern.....	9
2.11.6 Pallid Sturgeon.....	10
2.11.7 Dakota Skipper.....	11
2.11.8 Sprague’s Pipit	11
2.12 North Dakota Comprehensive Wildlife Conservation Strategy	11
2.13 Avoidance/Exclusion Areas and Resources Analysis Conclusions	12

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1 Percentage of Project Area Comprised of Specific Soil Types	5
2 Vegetation/Land Occupancy Types within the CIAA and Project Boundary.....	7
3 Drift Prairie Species of Conservation Priority	11

LIST OF APPENDICES

Appendix

- A Project Maps
 - Project Location Map
 - Public Utilities, Infrastructure, and Residential Distances Map
 - Land Use and Land-based Economics Map
 - Geologic Resources Map
 - Surface Water Map
 - Wildlife and Whooping Crane Migration Corridor Map
- B Project Photos

1.0 BACKGROUND AND PROJECT DESCRIPTION

The proposed project includes the construction of a Greenfield site and installation of two 150,000 BBL tanks along with a containment levee approximately four feet in height, in addition to two small booster pumps and up to four main line pumps. The purpose of the installation is to improve overall safety and product handling efficiency at the Keene site (site) and designed to allow the site to function more efficiently. The existing Keene site consists of petroleum tanks and truck load out facilities. The proposed project would take place south of the current facility on previously undisturbed ground, illustrated in the Project Location Map (Appendix A-1).

This report is intended to provide documentation and clearance regarding avoidance and exclusion areas to fulfill obligations under the North Dakota Public Service Commission (PSC) regulatory authority for upgrading existing storage facilities. In addition, potential impacts to public services and infrastructure; demographics; land use and land-based economics; recreational, cultural and archaeological, geologic and groundwater, and surface water resources; soils; wetlands; vegetation; wildlife, including endangered, threatened, and candidate species were analyzed and included as part of this report for PSC consideration for this project.

2.0 SITE ANALYSIS

The purpose of this analysis is to identify potential avoidance and exclusion areas, and any additional resources, within the proposed study area of the site that could preclude installation of the proposed upgrades. Exclusion and avoidance areas have been identified, along with other potential environmental concerns that should be avoided, minimized, or mitigated. The baseline criteria used for the analysis was obtained from the North Dakota PSC Rules, Article 69-06, Energy Conversion and Transmission Facility Siting.

The PSC regulations include the following criteria as exclusion areas for transmission facility corridors and route criteria.

- Designated or registered national parks, memorial parks, historic sites, historic landmarks, natural landmarks, monuments, and wilderness areas.
- Designated or registered state parks, historic sites, monuments, historic markers, archeological sites, and nature preserves.
- County parks and recreation areas; municipal parks; and parks owned or administered by other governmental subdivisions.
- Areas critical to the life stages or threatened and endangered animal or plant species.
- Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.

The PSC regulations include the following criteria as avoidance areas for transmission facility corridors and route criteria.

- Designated or registered national historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.
- Designated or registered state wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands.
- Historical resources which are not specifically designated as exclusion or avoidance areas.
- Areas which are geologically unstable.
- Areas within 500 feet (152.4 meters) of a residence, school, or place of business. This criterion shall not apply to a water pipeline transmission facility.
- Reservoirs and municipal water supplies.
- Water sources for organized rural water districts.
- Irrigate land. This criterion shall not apply to an underground transmission facility.
- Areas of recreational significant which are not designated as exclusion areas.

Resource agencies and agency Geographic Information Systems (GIS) data hubs were used to identify avoidance and exclusion areas. In addition, natural resources staff from SWCA Environmental Consultants (SWCA) completed a site visit and field inspection of the proposed project area on April 29, 2013.

2.1 PUBLIC SERVICES AND INFRASTRUCTURE

Data were gathered and analyzed, including residences, commercial properties, public facilities, transportation infrastructure and right-of-way, known transmissions lines, and telecommunication facilities, to determine potential impacts to public services and infrastructure.

The study area is located near Keene, North Dakota, between Mandaree, North Dakota and the city limits of Watford City, North Dakota. Public services and infrastructure found within and around the study area is mainly associated with oil and gas development. Watford City contains McKenzie County Hospital which offers major medical services, four clinics, one eye care clinic, and one nursing home. The city also has an elementary school and one high school. Mandaree has one K-12 public school. There is one residence/farmstead located approximately 1.23 miles southeast of the proposed project area as well as various oil and gas well pads throughout the study area, illustrated in the Residential Distances Map (Appendix A-2).

Additional roadways include gravel surfaced county roads, and two-track trails used primarily for agricultural purposes. Public utility transmission lines are located within the 1-mile study area. Additionally, underground oil and gas pipelines traverse the study area, illustrated on the Public Services and Infrastructure Map (Appendix A-2).

2.2 DEMOGRAPHICS

The proposed project is located in Twin Valley Township in McKenzie County, North Dakota. The nearest incorporated city to the study area is Watford City, North Dakota, which is approximately 20 miles west of the project area, and has a population of approximately 2,000 residents (U.S. Census Bureau 2010¹).

2.3 LAND USE AND LAND-BASED ECONOMICS

Zoning of the project area falls under the authority of McKenzie County. The proposed project area falls within land zoned Special Use designated for the facility.

The study area is located in a semi-rural part of North Dakota comprised primarily of grasslands with smaller portions of developed land and cropland intermixed. The proposed project would be located entirely within previously disturbed agricultural lands (Appendix B: Figure 1). The closest public land that occurs to the study area is the Little Missouri National Grassland, approximately 0.25 mile east of the proposed storage facility location, illustrated in the Land Use and Land Based Economics Map (Appendix A-3).

A wetland easement is a legal agreement entered into by the landowner and the U.S. Fish and Wildlife Service (USFWS) to permanently protect wetlands. The landowner agrees not to drain, burn, level, or fill wetlands covered by the easement in return for a single payment. Wetlands under an easement are mapped by the USFWS and a copy of the easement and maps are sent to the landowner. Wetland easements are considered part of the National Wildlife Refuge System and are administered for public benefit. There are no USFWS wetland easements located within the study area.

A grassland easement is also a legal agreement entered into by the landowner and the USFWS to permanently keep land in grass. The landowner is tasked with also protecting upland vegetation. Land under a grassland easement cannot be cultivated. Mowing, haying, and grass seed harvesting cannot occur until after July 15 of each year. There are no USFWS grassland easements located within the study area.

The USFWS administers the National Wildlife Refuge System, which includes National Wildlife Refuges (NWR) and Waterfowl Production Areas (WPA). NWRs serve the purpose of preserving and protecting lands for habitat of fish and wildlife. WPAs preserve wetlands and grasslands important to waterfowl and other wildlife. There are no NWRs or WPAs within the study area. The nearest NWRs are Lake Ilo NWR approximately 38.37 miles southeast of the study area and Shell Lake NWR, approximately 39.54 miles northeast of the proposed project location. The nearest WPA is the Follis WPA, approximately 20.05 miles northeast of the study area.

Land managed by the North Dakota Game and Fish Department (NDGF) consists of Private Land Opened to Sportsmen (PLOTS) and Wildlife Management Areas (WMA). PLOTS are easements administered by the NDGF to allow public hunting access to privately owned lands

¹ U.S. Census Bureau. 2010. American Fact Finder. Available online at http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml. Accessed May 3, 2013.

and for the development of habitat. These easements are placed on private lands that already provide ample habitat or as a way to enhance wildlife habitat for a variety of wildlife species. PLOTS easements do not exempt the parcel from development. However, if the NDGF deems construction devalues the habitat they wish to protect, compensation is paid to the landowner. There are no NDGF managed lands located within the study area and the closest NDGF managed land is the Antelope Creek WMA, approximately 13.26 miles northeast of the proposed project location.

The Natural Resources Conservation Service administers the Conservation Reserve Program (CRP). Agricultural landowners may enroll their land into the CRP, and receive an annual rental payment in a multi-year contract. The land is taken out of production for a given time to protect soil, water, and related natural resources. The proposed project area does not include lands enrolled in the CRP.

2.4 RECREATIONAL RESOURCES

Rangeland, cropland, wetlands, rivers, and streams are found near the study area. These areas may be used for hunting, bird watching, recreation, and potentially fishing purposes. The proposed project area exists in an agricultural field and therefore would not alter recreational opportunities. No recreational resources exist within the proposed project area.

2.5 CULTURAL AND ARCHAEOLOGICAL RESOURCES

If the project would include any federal funding or require a federal approval, such as a permit, compliance with Section 106 of the National Historic Preservation Act of 1996 (16 United States Code [USC] 470), as amended would be required. Section 106 requires that federally funded or permitted projects be evaluated for any effects or alteration to the characteristics of historic and cultural properties qualifying them for inclusion in or eligibility for listing in the National Register of Historic Places (NHRP). Federal involvement would also require compliance with the Archaeological and Historic Preservation Act of 1974 (16 USC 461 et seq., and 23 USC 305) which provides for the survey, recovery, and preservation of significant scientific, prehistoric, archaeological, or paleontological data when such data may be destroyed or irreparably lost due to a federally licensed or federally funded project.

SWCA conducted a Class I and Class III cultural resource inventory on April 10 and 28, 2013. The western portion of the proposed project area (approximately 6.2 acres) has been covered by a previous Class III cultural resource inventory. SWCA newly surveyed a total of 4.5 acres, the remaining eastern portion of the project area. No previously recorded cultural resources were identified in the course of the Class I research, and no new cultural resources were identified in the Class III Inventory.

2.6 SOILS

The entire project area would be on soil previously disturbed by agriculture. Natural Resources Conservation Service Soil Survey data for McKenzie County indicate soil in the proposed project area has a low to moderate susceptibility to sheet and rill erosion, and can

tolerate high levels of erosion without loss of productivity. The soil is well drained with a typical water table depth greater than 5 feet (Table 1).

Table 1. Percentage of Project Area Comprised of Specific Soil Types

Map Unit Code	Soil Series	Acres	% of Area
63D	Vebar-Flasher-Tally complex, 9 to 15 percent slopes	5.10	50.93
23B	Farnuf loam, 2 to 6 percent slopes	4.23	42.22
91F	Wabek-Zahl complex, 9 to 35 percent slopes	0.69	6.85
Total		10.02	100.00

If the project were to require federal involvement, the Farmland Protection Policy Act of 1982 (7 USC 4201 et seq.) would apply. The Farmland Protection Policy Act provides protection to prime and unique farmlands. Section 658.5 of the Farmland Protection Policy Act provides criteria for federal agencies to identify and take into account the adverse effects of federal programs on the protection of farmland. Federal agencies are to consider alternative actions, as appropriate, that could lessen adverse effects; and to assure that such federal programs, to the extent practicable, are compatible with state, unit of local government, and private programs and policies to protect farmland. The proposed project would consist of minor impacts to farmland. No further actions regarding the Farmland Protection Policy Act would be required.

2.7 GEOLOGIC AND GROUNDWATER RESOURCES

The Bakken Formation consists of a mainly flat to undulating landscape of varying sand, silt, and clay content. The region in which the study area is located is also known as the Prairie Pothole Region (PPR). This area was formed by glaciers moving across the state that became stagnant, depositing rock debris, gravel, and fine-grained sediments intermixed with large ice blocks. The ice blocks melted and created wetlands. Surface geology within the study area is considered part of the Sentinel Butte Formation. The Sentinel Butte Formation is comprised mainly of silt and sand approximately 656.17 feet thick whose main genesis was a result of the Missouri River.

Underlying the study area are deep sandstone aquifers within the Lower Tertiary. The nearest water well is located approximately 1.79 miles southwest of the proposed storage facility. The nearest point of the Keene Aquifer is 3.86 miles southwest the project area, as illustrated in the Geologic and Groundwater Resources Map (Appendix A-4).

2.8 SURFACE WATER AND FLOODPLAIN RESOURCES

The study area occurs in the Drift Prairie region of North Dakota, and is part of the PRR. This region is dotted with wetland basins of various sizes and water regimes. Additionally, the Missouri River, Lake Sakakawea, and smaller streams and drainages occur near the study area. Lake Sakakawea, which may be used for hunting, bird watching, fishing, and boating activities occurs approximately 8.99 straight-line miles from the project area. Smaller streams

and drainages near the project area would likely not be used for boating activities other than occasional occurrence of smaller watercraft associated with hunting or fishing. Digital floodplain data is not available for McKenzie County, North Dakota.

2.9 WETLANDS

Wetlands are defined both in the 1077 Executive Order 11990, Protection of Wetlands, and in Section 404 of the Clean Water Act of 1972, as those areas that are inundated by surface or groundwater with a frequency to support, and under normal circumstances, do or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. The Federal Manual for Delineating Jurisdictional Wetlands (United States Army Corps of Engineers 1987) identifies three parameters that define a wetland, hydric soils, hydrophytic vegetation, and hydrology. Wetlands include swamps, marshes, bogs, and similar areas that serve many functions, such as providing habitat for wildlife, storing floodwaters, recharging groundwater, and improving water quality through purification.

According to the USFWS National Wetland Inventory², there are three freshwater emergent wetlands, approximately 0.25 acre in size, approximately 75 to 100 feet to the south and south east of the proposed project location. These signatures are part of a greenway drainage that has been left uncropped. The site visit revealed no wetlands within the potential project area, illustrated on the Surface Water Map (Appendix A-5). One intermittent drainage was recorded by SWCA and is located directly south of the project area (Project Location Map: Appendix A-1; Figures 2 and 3: Appendix B).

2.10 VEGETATION

The proposed facility construction would take place directly south (crossing County Route 12) from the Keene facility and on areas that have been previously undisturbed by operations of the facility, but have been enrolled in crop production. Therefore, loss of 10.02 acres of cropland is associated with the proposed project. Vegetation noted at the project area includes wheat (*Triticum* spp.), crested wheatgrass (*Agropyron cristatum*), smooth brome (*Bromus inermis*), and cheatgrass (*Bromus tectorum*).

LANDFIRE data was compiled for vegetative cover types and is illustrated in the Land Use and Land Based Economics Map (Appendix A-3). Approximately, 10.02 acres of the proposed project area is comprised entirely of Agriculture-cropland crops and irrigated agriculture. The cover classes of the 1-mile study area are summarized in Table 2.

² U.S. Fish and Wildlife Service (USFWS). 2012. National Wetlands Inventory: Wetlands Online Mapper. Available online at <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed June 12, 2012.

Table 2. Vegetation/Land Occupancy Types within the CIAA and Project Boundary.

Category	Acres within Study Area	% of Study Area
Agriculture-Cultivated Crops and Irrigated Agriculture	1,348.06	57.32
Northwestern Great Plains Mixed Grass Prairie	700.44	29.79
Developed-Upland Herbaceous	116.03	4.93
Western Great Plains Depressional Wetland Systems	75.41	3.21
Western Great Plains Dry Bur Oak Forest and Woodland	51.66	2.20
Western Great Plains Sand Prairie	33.81	1.44
Western Great Plains Wooded Draw and Ravine	16.44	0.70
Northwestern Great Plains Shrubland	6.22	0.26
Introduced Upland Vegetation-Perennial Grassland and Forbland	1.78	0.08
Open Water	1.33	0.06
Western Great Plains Sparsely Vegetated Systems	0.22	0.01
Herbaceous Semi-wet	0.22	0.01
Total	2,351.62	100.00

2.11 WILDLIFE

The study area is located in the western region of North Dakota and the Central Flyway of North America. This area is used as resting grounds for many birds on their spring and fall migration, as well as nesting and breeding grounds for many waterfowl species. Other non-game bird species are known to fly through and inhabit this region. Waterfowl, non-game bird species, as well as raptors can be found near the study area.

Protection is provided for bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*), as well as other migratory birds, through the Bald and Golden Eagle Protection Act of 1940 (16 USC 668–668d), as amended, and the Migratory Bird Treaty Act (916 USC 703–711). The Bald and Golden Eagle Protection Act was written with the intent to protect and preserve bald and golden eagles, both of which are treated as species of concern within the Department of the Interior. Additionally, the Migratory Bird Treaty Act regulates impacts to these species such as direct mortality, habitat degradation, and/or displacement of individual birds. The Migratory Bird Treaty Act prohibits the taking, among other things, of migratory birds, their eggs, parts and nests, except when specifically permitted by regulation. Taking is defined as hunt, capture, kill, possess, sell, purchase, ship, transport, carry, or export any part, nest, egg of a migratory bird.

No bald or golden eagle nests were identified within a 0.5-mile line-of-sight survey during the field survey. The closest recorded golden eagle nest is approximately 4.87 miles east of the proposed project location. The golden eagle primary breeding range is shown in the Wildlife Map (Appendix A-6). During the field survey, no raptor nests were observed within a 0.5-mile line-of-sight survey.

The area is also inhabited by numerous mammals including white-tailed deer (*Odocoileus virginianus*), rabbit (*Sylvilagus floridanus*), fox (*Vulpes vulpes*), coyote (*Canis latrans*), beaver (*Castor canadensis*), and muskrat (*Ondatra zibethicus*)³. Wildlife observed during the field survey included western meadowlark (*Sturnella neglecta*), mallard (*Anas platyrhynchos*), collared dove (*Streptopelia decaocto*), and Sprague's pipit (*Anthus spragueii*). The proposed project would occur entirely within previously disturbed agricultural land and would have minimal impact to wildlife or associated habitats, illustrated on the Wildlife Map (Appendix A-6).

In accordance with Section 7 of the Endangered Species Act of 1973 (Title 50 Code of Federal Regulations Part 402), as amended, any proposed action must not be likely to jeopardize the continued existence of any federally listed endangered or threatened species or species proposed to be listed. In addition, no such action can result in the destruction or adverse modification of habitat of such species that is determined to be critical. An endangered species is one which is in danger of extinction throughout all or a significant portion of its range. A threatened species is one that is likely to become endangered in the foreseeable future. A candidate species is one which is being considered for listing as an endangered or threatened species, but no proposed rule for listing has been made. While candidate species are not legally protected under the Endangered Species Act, it is within the spirit of the Endangered Species Act to consider these species as having significant value and worth protecting.

According to the USFWS North Dakota County List (May 2013), five endangered species—gray wolf (*Canis lupus*), black-footed ferret (*Mustela nigripes*), pallid sturgeon (*Scaphirhynchus albus*), interior least tern (*Sterna antillarum*), and whooping crane (*Grus americana*)—occur within McKenzie County. In addition, one threatened species (piping plover [*Charadrius melodus*]), designated critical habitat for the piping plover, and two candidate species (Dakota skipper [*Hesperia dacotae*] and Sprague's pipit [*Anthus spragueii*]) occur within McKenzie County. Listed species are discussed in detail below. During the field survey, a candidate species, Sprague's pipit, was heard calling. SWCA did not observe any other endangered, threatened, or candidate species during the field survey.

2.11.1 Gray Wolf

The gray wolf is the largest wild canine species in North America and is found throughout northern Canada, Alaska, and the forested areas of northern Michigan, Minnesota, and Wisconsin and has been introduced to Yellowstone National Park in Wyoming. The gray wolf uses a variety of habitat that support a large prey base which include montane and low-elevation forests, grasslands and desert scrub. The closest known pack of wolves is the Minnesota population located approximately 17.4 miles from the northeast corner of North Dakota. Because of the lack of preferred habitat in the proposed project area and distance from known wolf populations, the proposed project will not affect the gray wolf.

³ Seabloom, R. 2011. Mammals of North Dakota. North Dakota State University: Institute for Regional Studies.

2.11.2 Black-footed Ferret

Black-footed ferrets are nocturnal, solitary carnivores of the weasel family that have been largely extirpated from the wild primarily due to range-wide decimation of the prairie dog (*Cynomys* sp.) ecosystem. They have been listed by the USFWS as endangered since 1967, and have been the object of extensive re-introduction programs. Ferrets inhabit extensive prairie dog complexes of the Great Plains, typically composed of several smaller colonies in proximity to one another that provide a sustainable prey base. Black-footed ferrets require black-tailed prairie dog (*Cynomys ludovicianus*) towns or complexes greater than 80 acres in size, and towns of this dimension may be important for ferret recovery efforts. Prairie dog towns of this size are not found in the general project area. In addition, this species has not been observed in the wild for more than 20 years. The proposed project would not affect the black-footed ferret.

2.11.3 Whooping Crane

The whooping cranes migration corridors ranges through the Midwest and Rocky Mountain regions including North Dakota along a band running from the south-central to the northwest parts of the state. Studies indicate that whooping cranes use a variety of habitats during migration, in addition to cultivated croplands, and generally roost in small palustrine (marshy) wetlands within 1 kilometer of suitable feeding areas. During migration, whooping cranes are often recorded in riverine habitats, including the Missouri River. The July 2010 total wild population was estimated at 383. The study area is located within the area of the Central Flyway where 95 percent of all whooping crane sightings have occurred, as illustrated in the Wildlife Map (Appendix A-6). In addition, various emergent wetlands and cropland occur near the study area. Due to the proposed project occurring entirely on previously cropped agricultural land with no anticipated impacts to wetlands or producing cropland, as well as the presence of large amounts of developed land with the study area, it was determined that the proposed project would not affect the whooping crane.

2.11.4 Piping Plover

The piping plover is a small shorebird which breeds only in three geographic regions of North America: the Atlantic Coast, the Northern Great Plains, and the Great Lakes. Drastically reduced, sparse populations presently occur throughout this historic range. In North Dakota, breeding and nesting sites can be found along the Missouri River. Preferred habitat for the piping plover includes riverine sandbars, gravel beaches, alkali areas of wetlands, and flat, sandy beaches with little vegetation. The USFWS has identified critical habitat for the piping plover in McKenzie County. Critical habitat includes sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and alkali wetlands. Potential habitat in the form of the sandy/gravelly Lake Sakakawea shoreline is approximately 8.99 straight-line miles away at the closest point. Due to the lack of potential habitat in the project area, the proposed project would not affect the piping plover.

2.11.5 Interior Least Tern

The population of the interior least tern is listed as endangered by the USFWS. This bird is the smallest member of the gull and tern family, measuring approximately 9 inches in length.

Terns remain near flowing water, where they feed by hovering over and diving into standing or flowing water to catch small fish.

Interior least terns breed in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande River systems, where they nest in small colonies. From late April to August, terns nest in a shallow hole scraped in an open sandy area, gravel patch, or exposed flat and bare sandbars along rivers, sand and gravel pits, or lake and reservoir shorelines. The adults continue to care for chicks after they hatch. Least terns in North Dakota will often be found sharing sandbars with the piping plover, a threatened species.

Census data indicate over 8,000 interior least terns in the population. In North Dakota, the least tern is found mainly on the Missouri River from Garrison Dam south to Lake Oahe, and on the Missouri and Yellowstone Rivers upstream of Lake Sakakawea. Approximately 100 pairs breed in North Dakota. Details of their migration are not known, but their winter range is reported to include the Gulf of Mexico and Caribbean Islands.

Potential habitat in the form of the sandy/gravelly Lake Sakakawea shoreline is approximately 8.99 straight-line miles away at the closest point. While terns could potentially traverse the general area, it is unlikely that terns would visit the upland habitats present in the project area. Due to the lack of potential habitat in the project area, the proposed project would not affect the interior least tern.

2.11.6 Pallid Sturgeon

The pallid sturgeon was listed as Endangered in 1990 in the United States by the USFWS. The primary factor leading to the decline of this species is the alteration of habitat through river channelization, creation of impoundments, and alteration of flow regimes. These alterations within the Missouri River have blocked movements to spawning, feeding, and rearing areas, destroyed spawning habitat, altered flow conditions which can delay spawning cues, and reduced food sources by lowering productivity. The fundamental elements of pallid sturgeon habitat are defined as the bottom of swift waters of large, turbid, free-flowing rivers with braided channels, dynamic flow patterns, flooding of terrestrial habitats, and extensive microhabitat diversity.

The pallid sturgeon population which is found near the general project area occurs from the Missouri River below Fort Peck Dam to the headwaters of Lake Sakakawea and the lower Yellowstone River up the confluence of the Tongue River, Montana. This population consists of approximately 136 wild adult pallid sturgeon. Hatchery reared sturgeon have also been stocked since 1998. The pallid sturgeon has been found to use the 25 kilometers of riverine habitat that would be inundated by Lake Sakakawea at full pool. Larval pallid sturgeons have also been found to drift into Lake Sakakawea. While the majority of pallid sturgeons are found in the headwaters of Lake Sakakawea, the NDGF has caught and released pallid sturgeon in nets set in 80 to 90 feet of water between the New Town and Van Hook areas. Based on this information, pallid sturgeon could be found throughout Lake Sakakawea.

Suitable habitat for pallid sturgeon does not occur in the project area, and Lake Sakakawea is a minimum of approximately 44.60 river miles away from the proposed project area. Activities associated with the construction, production, or reclamation of the proposed project

area are not anticipated to adversely affect water quality and subsequently the pallid sturgeon. Due to lack of potential habitat in the project area, the proposed project would not affect the pallid sturgeon.

2.11.7 Dakota Skipper

The Dakota skipper is a small butterfly with a 1-inch wingspan and is found primarily in undisturbed native tall grass and upland dry Northern mixed grass prairie areas with a high diversity of wildflowers and grasses. These butterflies historically ranged from southern Saskatchewan, across the Dakotas and Minnesota, to Iowa and Illinois. Dakota skippers are visible in their butterfly stage from mid-June to early July. Due to the proposed project occurring entirely within a disturbed agricultural field with no recorded Dakota skipper preferred vegetation; the proposed project would not affect the Dakota skipper.

2.11.8 Sprague's Pipit

The Sprague's pipit is a small songbird found in prairie habitats with plant species diversity. The Sprague's pipit breeds in habitat with minimal human disturbance. During the field survey, SWCA biologists recorded hearing a Sprague's pipit call. However, due to the location of the proposed project being on previously disturbed land used for agriculture, and adjacent to highly developed land, it was determined that the proposed project would not affect the Sprague's pipit.

2.12 NORTH DAKOTA COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY

The NDGF has also developed a *North Dakota Comprehensive Wildlife Conservation Strategy* (2005). As part of the strategy, the NDGF have identified species of conservation priority for the purposes of developing a management strategy; however, these species are provided no legal protection. There are three conservation priority levels (I, II, III). Species of all three conservation priority levels are listed within the Drift Prairie region, as shown in Table 3. Level I species are those that have a high conservation need because of declining populations within North Dakota or are declining over the species' range and the core of their breeding population occurs in North Dakota. Level II species have a moderate conservation need or are high priority species without available funding for protection. Level III species have a moderate need of conservation, but are believed to be on the edge of their range in North Dakota.

Table 3. Drift Prairie Species of Conservation Priority

Name	Priority Level
Birds	
American bittern	I
Northern pintail	II
Northern harrier	II
Swainson's hawk	I
Ferruginous hawk	I
Sharp-tailed grouse	II

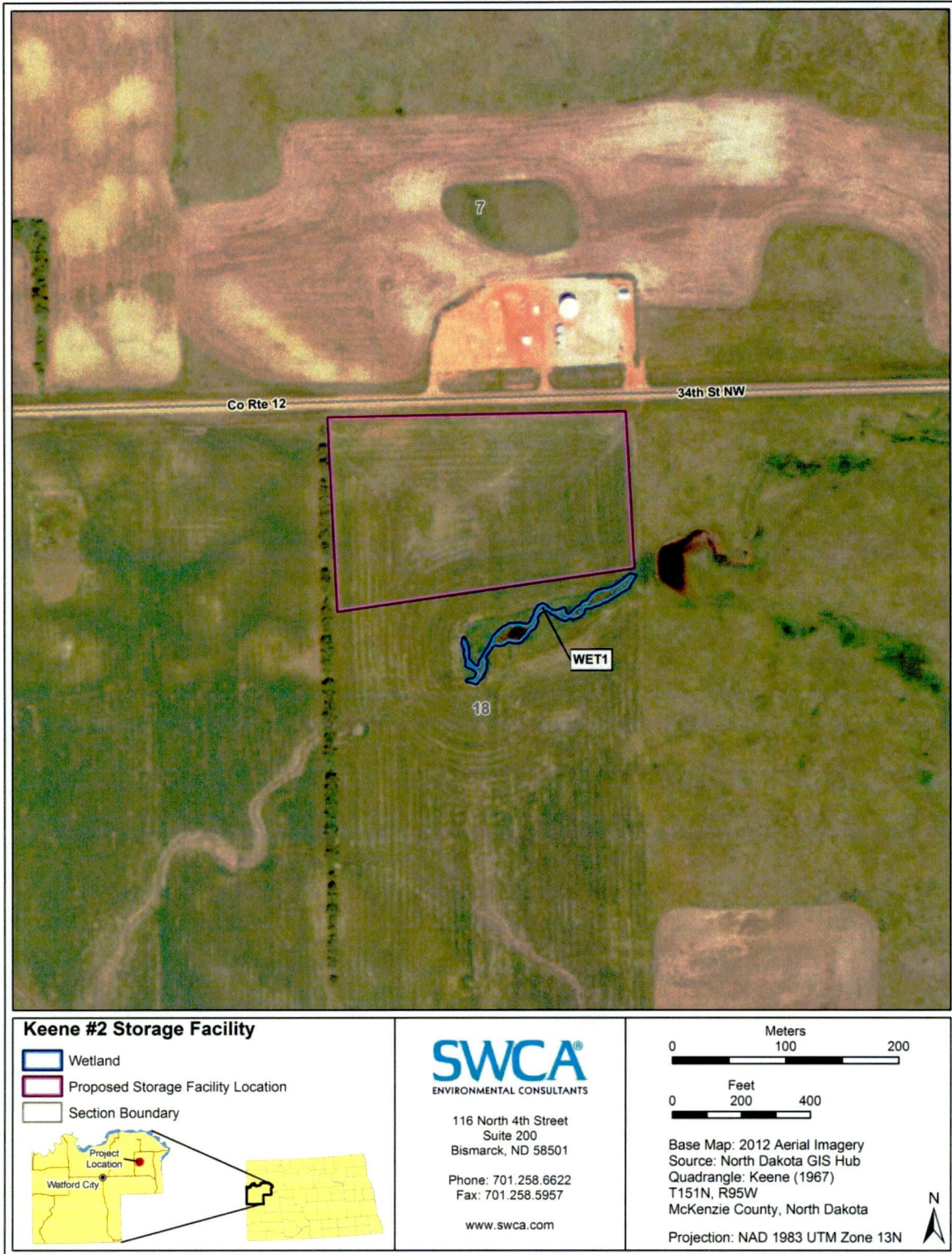
Name	Priority Level
Willet	I
Upland sandpiper	I
Marbled godwit	I
Wilson's phalarope	I
Short-eared owl	II
Loggerhead shrike	II
Sedge wren	II
Sprague's pipit	I
Lark bunting	I
Grasshopper sparrow	I
Baird's sparrow	I
Le Conte's sparrow	II
Nelson's sharp-tailed sparrow	I
Chestnut-collared longspur	I
Dickcissel	II
Bobolink	II
Mammals	
Arctic Shrew	III
Pygmy Shrew	II
Richardson's ground squirrel	II
Reptiles/Amphibians	
Plains spadefoot	I
Canadian toad	I
Smooth green snake	I
Western hognose snake	I

In addition to the threatened and endangered species and conservation priority species discussed above, the North Dakota Natural Heritage biological conservation database identifies state sensitive species. No known state sensitive species are located within or adjacent to the proposed project location.

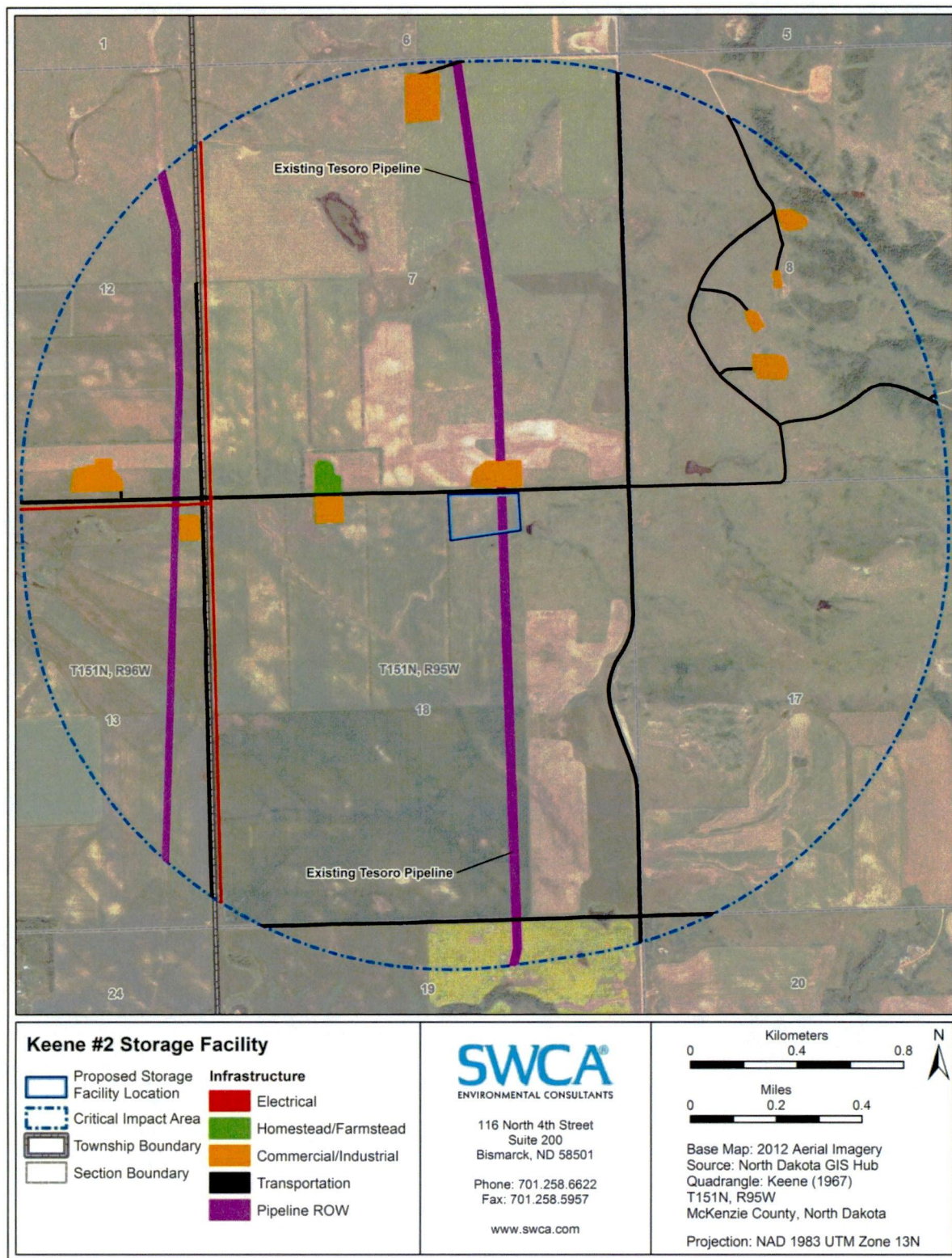
2.13 AVOIDANCE/EXCLUSION AREAS AND RESOURCES ANALYSIS CONCLUSIONS

Results of the data analysis from GIS desktop review, agency coordination, and field surveys reveal no avoidance or exclusion areas occurring within the proposed project area. The project area has been previously disturbed by agricultural development. The proposed project is anticipated to have no impact on public services and infrastructure; demographics; land use and land-based economics; recreational, cultural and archaeological, geologic and groundwater, and surface water resources; soils; wetlands; vegetation; wildlife, including threatened, endangered, and candidate species of McKenzie County.

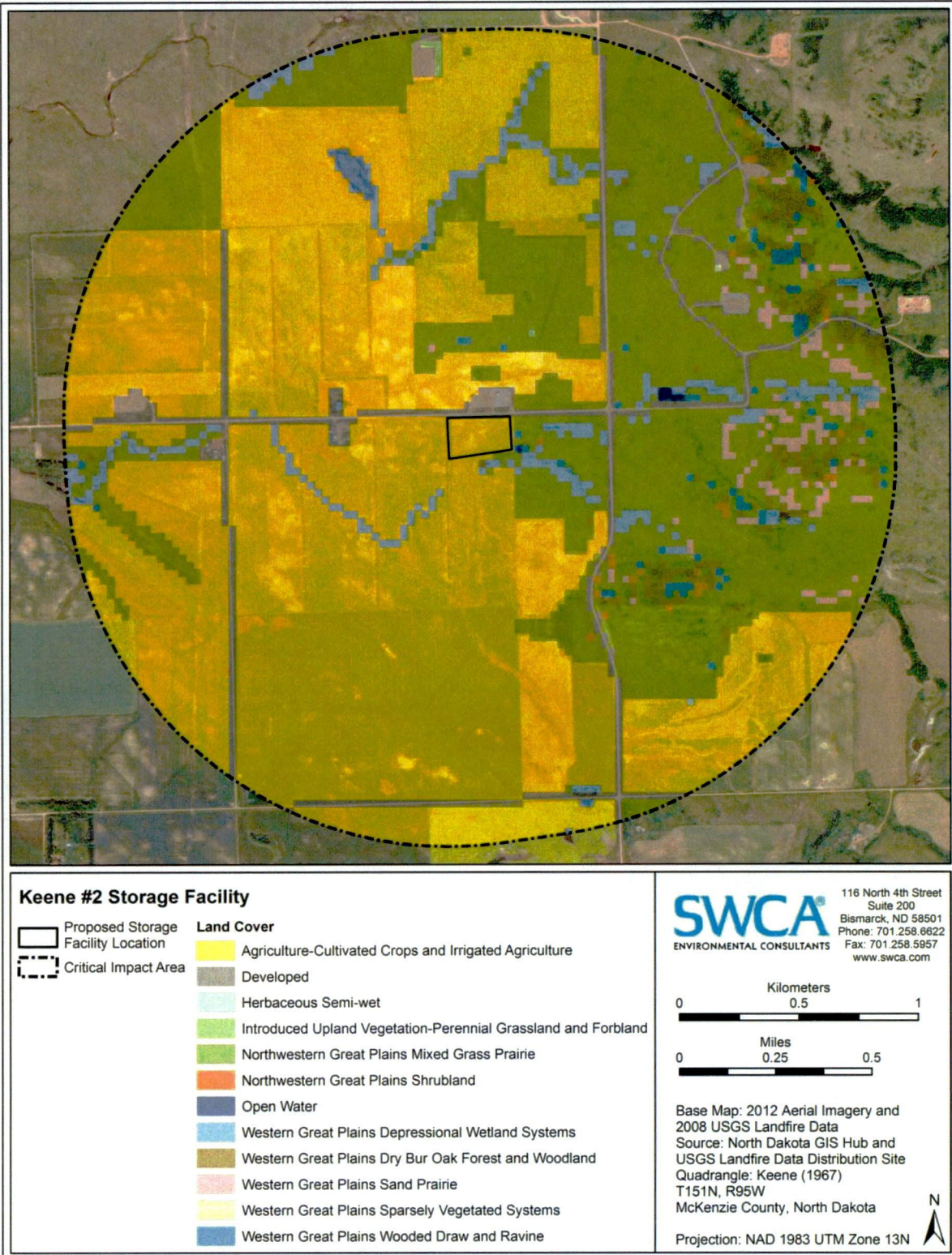
APPENDIX A
Project Maps



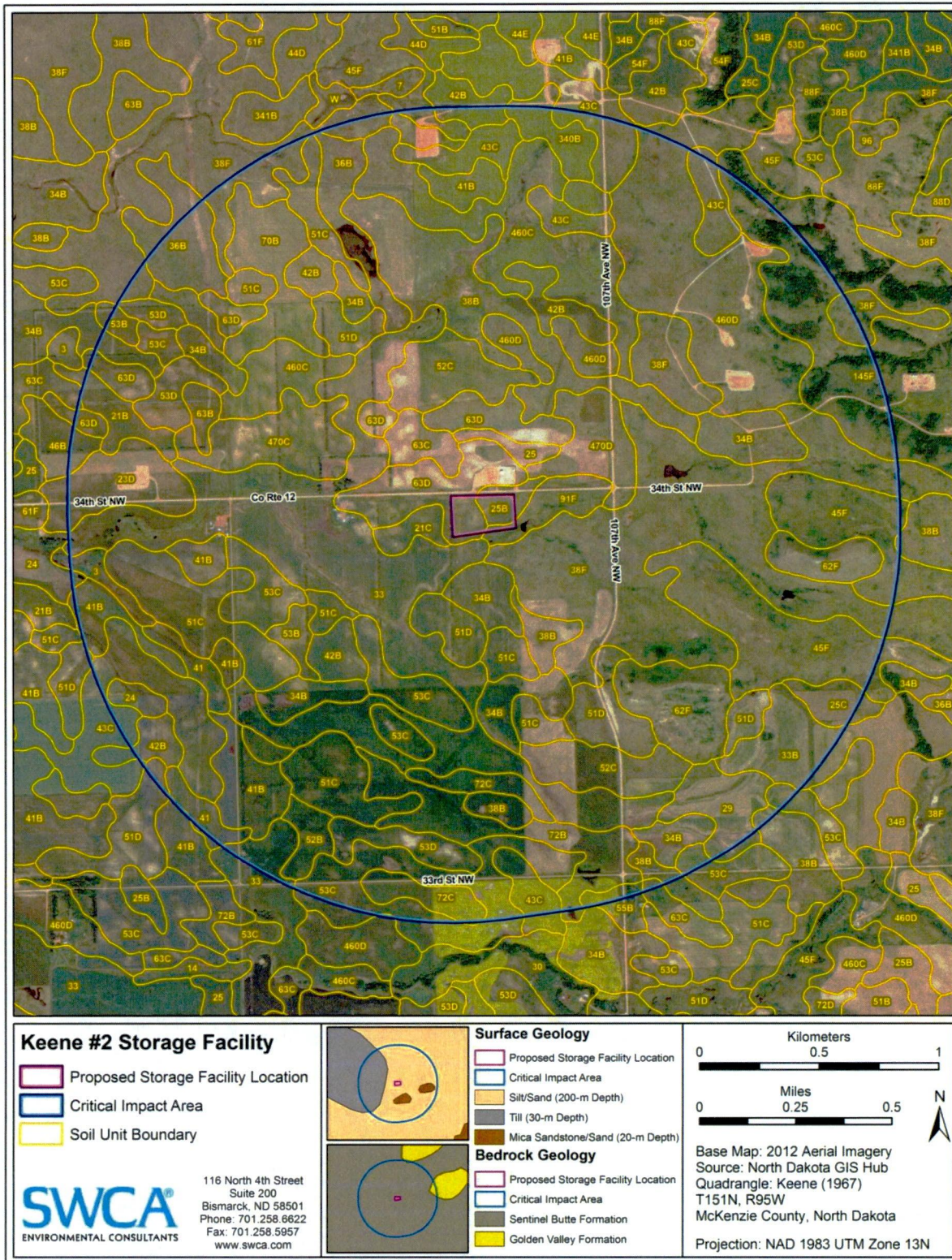
A-1. Project Location Map.



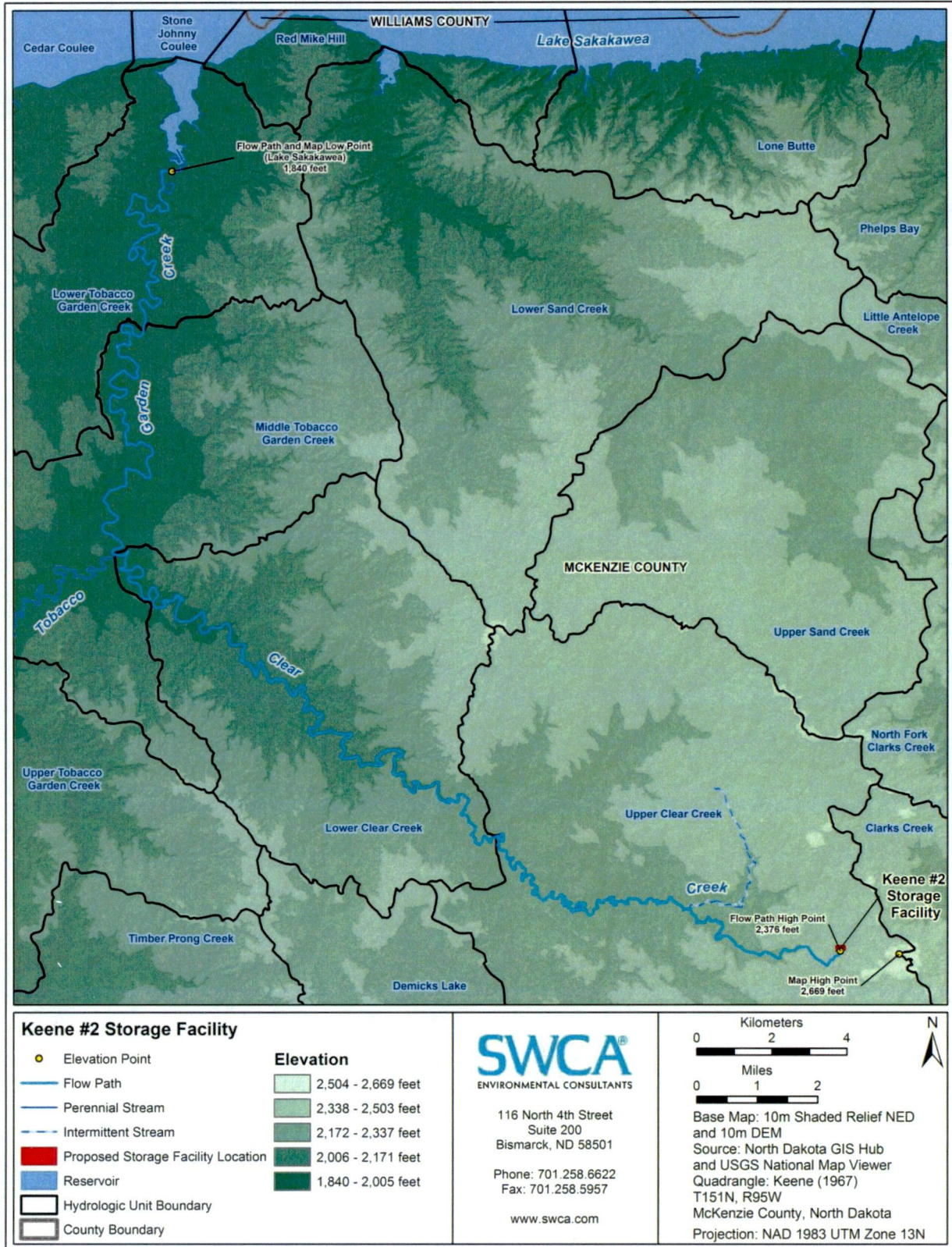
A-2. Public Utilities, Infrastructure, and Residential Distances Map.



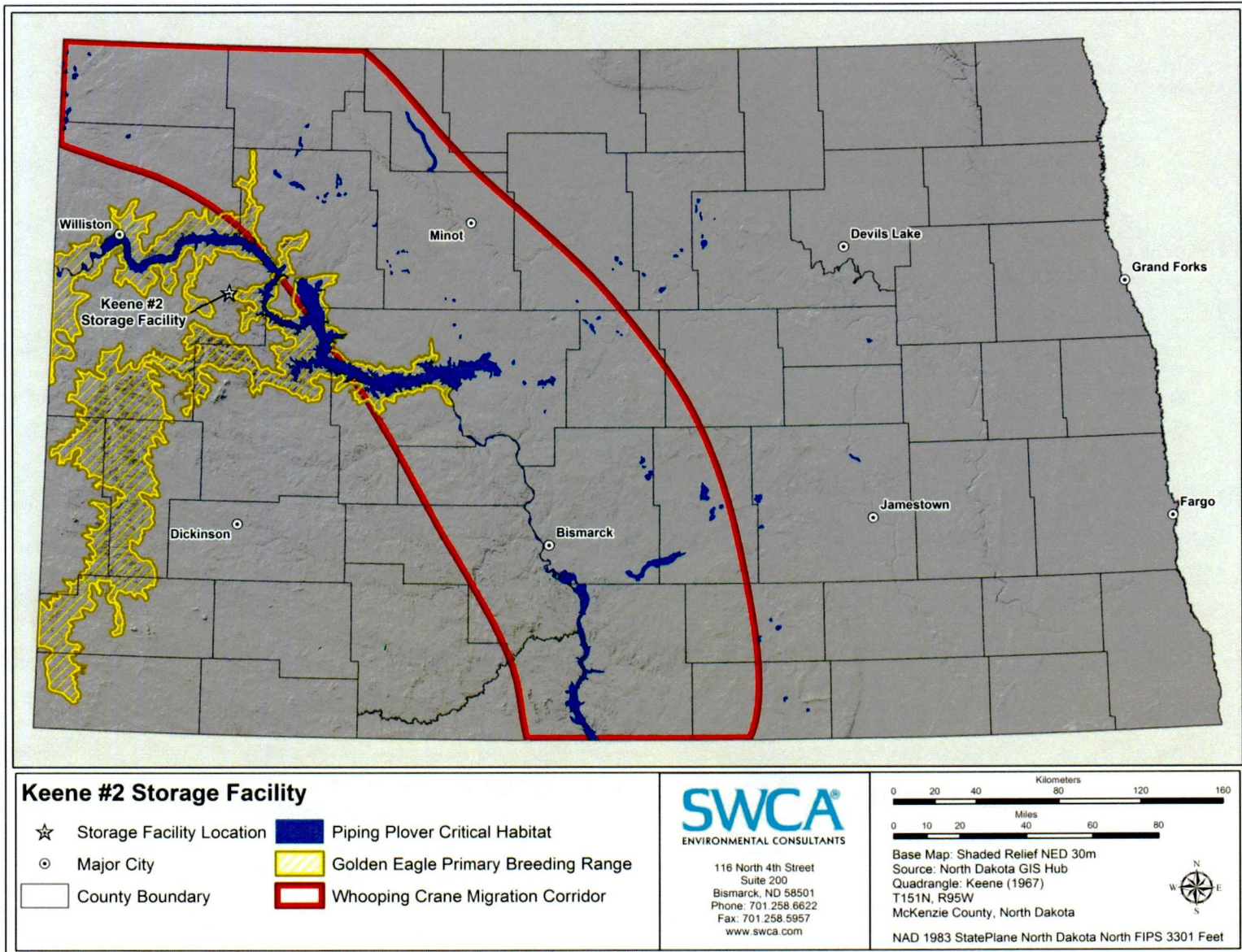
A-3. Land Use and Land-based Economics Map.



A-4. Geologic and Groundwater Resources Map.



A-5. Surface Water Map.



A-6. Wildlife and Whooping Crane Migration Corridor Map.

APPENDIX B
Project Photographs



Figure 1. Overview of proposed project area and agricultural field, facing north (Photo taken April 29, 2013).



Figure 2. Intermittent drainage located south of proposed project area, facing east (Photo taken April 29, 2013).



**Figure 3. Intermittent drainage located south of proposed project area, facing south
(Photo taken April 29, 2013).**



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

Jack Dalrymple
Governor of North Dakota

May 16, 2013

North Dakota
State Historical Board

Mr. William Harding, RPA
Principal Investigator
SWCA

Gereld Gerntholz
Valley City - President

116 North 4th St, Suite 200
Bismarck, ND 58501

Calvin Grinnell
New Town - Vice President

ND SHPO Ref: 13-0876 ND PSC Wood Group Mustang, Inc. "A Class I and Class III Cultural Resource Inventory of the Tesoro's Johnson's Corner Crude Oil Pumping Facility, McKenzie County, North Dakota" in portions of [T150N R95W Section 19]

A. Ruric Todd III
Jamestown - Secretary

Albert I. Berger
Grand Forks

Diane K. Larson
Bismarck

Dear Mr. Harding,

Chester E. Nelson, Jr.
Bismarck

We reviewed ND SHPO Ref: 13-0876 ND PSC Wood Group Mustang, Inc. "A Class I and Class III Cultural Resource Inventory of the Tesoro's Johnson's Corner Crude Oil Pumping Facility, McKenzie County, North Dakota." We concur with "No Significant Sites" state level determination for this project, provided it remains as described and mapped in your above-referenced Class III Inventory dated May 14, 2013.

Margaret Puetz
Bismarck

Sara Otte Coleman
*Director
Tourism Division*

Thank you for the opportunity to review this project. Please include the ND SHPO reference number listed above in any further correspondence for these specific projects. If you have any questions, please contact Susan Quinnell, Review & Compliance Coordinator 701-328-3576, e-mail: squinnell@nd.gov

Kelly Schmidt
State Treasurer

Alvin A. Jaeger
Secretary of State

Sincerely,

Mark Zimmerman
*Director
Parks and Recreation
Department*

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

Francis Ziegler
*Director
Department of Transportation*

Merlan E. Paaverud, Jr.
Director

Accredited by the
American Association
of Museums since 1986



**STATE
HISTORICAL
SOCIETY
OF NORTH DAKOTA**

Jack Dalrymple
Governor of North Dakota

North Dakota
State Historical Board

Gereld Gerntholz
Valley City - President

Calvin Grinnell
New Town - Vice President

A. Ruric Todd III
Jamestown - Secretary

Albert I. Berger
Grand Forks

Diane K. Larson
Bismarck

Chester E. Nelson, Jr.
Bismarck

Margaret Puetz
Bismarck

Sara Otte Coleman
*Director
Tourism Division*

Kelly Schmidt
State Treasurer

Alvin A. Jaeger
Secretary of State

Mark Zimmerman
*Director
Parks and Recreation
Department*

Francis Ziesler
*Director
Department of Transportation*

Merlan E. Paaverud, Jr.
Director

*Accredited by the
American Association
of Museums since 1986*

May 16, 2013

Mr. William Harding, RPA
Principal Investigator
SWCA
116 North 4th St, Suite 200
Bismarck, ND 58501

ND SHPO Ref: 13-0877 ND PSC Wood Group Mustang, Inc. "A Class I and Class III Cultural Resource Inventory of the Tesoro's Keene #2 Crude Oil Storage Facility, McKenzie County, North Dakota" in portions of [T151N R95W Section 18]

Dear Mr. Harding,

We reviewed ND SHPO Ref: 13-0877 ND PSC Wood Group Mustang, Inc. "A Class I and Class III Cultural Resource Inventory of the Tesoro's Keene #2 Crude Oil Storage Facility, McKenzie County, North Dakota." We concur with "No Significant Sites" state level determination for this project, provided it remains as described and mapped in your above-referenced Class III Inventory dated May 14, 2013.

Thank you for the opportunity to review this project. Please include the ND SHPO reference number listed above in any further correspondence for these specific projects. If you have any questions, please contact Susan Quinnell, Review & Compliance Coordinator 701-328-3576, e-mail: squinnell@nd.gov

Sincerely,

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