



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401



IN REPLY REFER TO:
DESCRM
MC-208

NOV 02 2011

MEMORANDUM

TO: Superintendent, Fort Berthold Agency

FROM: Acting Regional Director, Great Plains Region

SUBJECT: Environmental Assessment and Finding of No Significant Impact

In compliance with the regulations of the National Environmental Policy Act (NEPA) of 1969, as amended, an Environmental Assessment has been completed and a Finding of No Significant Impact (FONSI) has been issued. The environmental assessment authorizes land use for the Mandaree Cut Across 5-16 and 2-09 pipeline by Saddle Butte Pipeline, LLC, on the Fort Berthold Indian Reservation.

All the necessary requirements of the National Environmental Policy Act have been completed. Attached for your files is a copy of the EA Addendum, FONSI and Notice of Availability. The Council on Environmental Quality (CEQ) regulations require that there be a public notice of availability of the FONSI (40 C.F.R. Part 1506.6(b)). Please post the attached notice of availability at the Agency and Tribal buildings for 30 days.

If you have any questions, please call Marilyn Bercier, Regional Environmental Scientist, Division of Environment, Safety and Cultural Resources Management, at (605) 226-7656.

Attachment

cc: Tex Hall, Chairman, Three Affiliated Tribes (with attachment)
Elgin Crows Breast, Tribal Historic Preservation Officer (with attachment)
Derek Enderud, BLM, Bureau of Land Management (with attachment)
Grady Wolf, KLJ (with attachment)
Jonathon Shelman, Corps of Engineer
Jeff Hunt, Fort Berthold Agency

Finding of No Significant Impact

Saddle Butte Pipeline, LLC (Saddle Butte)

Environmental Assessment for Mandaree Cut Across 5-16 and 2-09 Oil and Gas Pipelines

Fort Berthold Indian Reservation McKenzie County, North Dakota

The U.S. Bureau of Indian Affairs (BIA) has received a proposal to construct pipelines located as follows:

- T149N, R94W, SW¼ of Section 4, NE¼ of Section 8, NW¼ of Section 9 (McKenzie County)
- T149N, R94W, SW¼ of Section 9 (McKenzie County)


Associated federal actions by BIA include determinations of effect regarding environmental resources for the construction of the Mandaree Cut Across 5-16 and 2-09 lateral pipelines.

The potential of the proposed action to impact the human environment is analyzed in the following Environmental Assessment (EA), as required by the National Environmental Policy Act. Based on the EA, I have determined that the proposed project will not significantly affect the quality of the human or natural environment. No Environmental Impact Statement is required for any portion of the proposed activities.

This determination is based on the following factors:

1. Agency and public involvement solicited for the preceding NEPA document was sufficient to ascertain potential environmental concerns associated with the currently proposed project.
2. Protective and prudent measures were designed to minimize impacts to air, water, soil, vegetation, wetlands, wildlife, public safety, water resources, and cultural resources. The remaining potential for impacts was disclosed for both the proposed action and the No Action alternatives.
3. Guidance from the U.S. Fish and Wildlife Service has been fully considered regarding wildlife impacts, particularly in regard to threatened or endangered species. This guidance includes the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds", and the Endangered Species Act (16 U.S.C. 1531 et seq.) (ESA).
4. The proposed action is designed to avoid adverse effects to historic, archaeological, cultural and traditional properties, sites and practices. Compliance with the procedures of the National Historic Preservation Act is complete.
5. Environmental justice was fully considered.
6. Cumulative effects to the environment are either mitigated or minimal.

7. No regulatory requirements have been waived or require compensatory mitigation measures.
8. The proposed project will improve the socio-economic condition of the affected Indian community.


Regional Director

11-2-11
Date

ENVIRONMENTAL ASSESSMENT

United States Bureau of Indian Affairs

Great Plains Regional Office
Aberdeen, South Dakota



Saddle Butte Pipeline, LLC

Mandaree Cut Across 5-16 and 2-09

Fort Berthold Indian Reservation

October 2011

For information contact:

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CONTENTS

Chapter 1	Purpose and Need for Action	1
1.1	Introduction.....	1
1.2	Description of the Proposed Action	1
1.3	Need for the Proposed Action	3
1.4	Purpose of the Proposed Action.....	3
1.5	Regulations that Apply to Oil and Gas Development Activities.....	3
Chapter 2	ALTERNATIVES	4
2.1	Introduction.....	4
2.2	Alternative A: No Action	4
2.3	Alternative B: Proposed Action	4
2.4	Construction and Plan Specifications	5
2.5	Reclamation.....	6
2.6	Operation and Maintenance	7
2.7	Preferred Alternative.....	8
Chapter 3	DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS	9
3.1	Introduction.....	9
3.2	Climate, Geologic Setting, and Land Use.....	9
3.2.1	Climate, Geologic Setting and Land Use Impacts/Mitigation	11
3.3	Soils.....	11
3.3.1	Soil Impacts/Mitigation	11
3.4	Water Resources	12
3.4.1	Surface Water	12
3.4.1.1	Surface Water Impacts/Mitigation	13
3.4.2	Ground Water.....	15
3.4.2.1	Ground water Impacts/Mitigation	16
3.5	Wetlands	16
3.5.1	Wetland impacts/Mitigation	16
3.6	Air Quality.....	16
3.6.1	Air Quality Impacts/Mitigation	17
3.7	Threatened, Endangered, and Candidate Species.....	18
3.7.1	Threatened Species	18
3.7.1.2	Threatened Species Impacts/Mitigation	19
3.7.2	Endangered Species.....	19
3.7.2.2	Endangered Species Impacts/Mitigation	20
3.7.3	Candidate Species.....	21
3.7.3.2	Candidate Species Impacts/Mitigation	21
3.8	Eagles.....	21
3.8.1	Eagle Impacts/Mitigation.....	22
3.9	Migratory Birds and Other Wildlife	24
3.9.1	Migratory Birds and Other Wildlife Impacts/Mitigation.....	24
3.10	Vegetation	25
3.10.1	Vegetation Impacts/Mitigation	28

3.11	Cultural Resources.....	29
3.11.1	Cultural Resources Impacts/Mitigation	30
3.12	Socioeconomic Conditions	30
3.12.1	Socioeconomic Impacts/Mitigation.....	30
3.13	Environmental Justice.....	31
3.13.1	Environmental Justice Impacts/Mitigation	32
3.14	Infrastructure and Utilities	33
3.14.1	Infrastructure and Utility Impacts/Mitigation	33
3.15	Public Health and Safety.....	33
3.15.1	Public Health and Safety Impacts/Mitigation	34
3.16	Cumulative Considerations.....	37
3.16.1	Past, Present, and Reasonable Foreseeable Actions	37
3.16.2	Cumulative Impact Assessment.....	38
3.17	Irreversible and Irretrievable Commitment of Resources.....	40
3.18	Short-term Use of the Environment versus Long-term Productivity.....	40
3.19	Permits	40
3.20	Environmental Commitments/Mitigation	41
Chapter 4	PREPARERS AND AGENCY COORDINATION.....	43
4.1	Introduction.....	43
4.2	Preparers	43
4.3	Agency Coordination	43
4.4	Public Involvement	44
Chapter 5	References	45
5.1	References.....	45

FIGURES

Figure 1, Project Location Map.....	2
Figure 2, Typical ROW Cross Section.....	6
Figure 3, Land Use	10
Figure 4, Surface Water Resources.....	14
Figure 5, Aquifers and Groundwater Wells.....	15
Figure 6, Bald and Golden Eagle Habitat and Nesting Sites.....	23
Figure 7, Grazed Pasture Land, View West	26
Figure 8, Grazed Rangeland, View South	27
Figure 9, Rangeland with Wooded Draw, View West	27
Figure 10, Blast Zone Perimeter Map	36
Figure 11, Existing and Proposed Oil and Gas Wells	38

TABLES

Table 1, Soils 11
Table 2, Watersheds and Sub-Watersheds 13
Table 3, Federal and State Air Quality Standards and Reported Data for TRNP-NU..... 17
Table 4, Observed Migratory Birds and Other Wildlife 24
Table 5, Noxious Weed Species 28
Table 6, Employment and Income 31
Table 7, Demographic Trends..... 32
Table 8, Summary of Active and Proposed Wells 38
Table 9, Preparers 43

APPENDIX

- Appendix A, Agency Scoping Materials**
- Appendix B, Agency Scoping Responses**
- Appendix C, Pipeline Plats**

CHAPTER 1 PURPOSE AND NEED FOR ACTION

1.1 Introduction

This Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the regulations of the Council on Environmental Quality (CEQ), 40 CFR parts 1500 through 1508. An EA is an informational document intended for use by both decision-makers and the public. It discloses relevant environmental information concerning the proposed action and the no action alternative.

1.2 Description of the Proposed Action

The Fort Berthold Reservation encompasses 988,000 acres, 457,837 of which are in tribal and individual Indian ownership by the Three Affiliated Tribes (Mandan, Hidatsa, and Arikara) and its members. The reservation is located in west central North Dakota and is split into three areas by Lake Sakakawea, which traverses the center of the reservation. It occupies sections of six counties: Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward.

The Fort Berthold Reservation lies atop the Bakken Formation, a geologic formation rich in oil and gas deposits that extends approximately 25,000 square miles beneath North Dakota and Montana, United States and Saskatchewan and Manitoba, Canada. Approximately two-thirds of the Bakken Formation is beneath North Dakota. The Three Forks Formation lies beneath the Bakken. The North Dakota Department of Mineral Resources estimates that there are approximately two billion barrels of recoverable oil in each of these formations¹. The Department's director estimates that there are 30 to 40 remaining years of production, or more if technology improves.

The proposed action included approval by the Bureau of Indian Affairs (BIA) for the construction of up to four pipelines each within two separate 100-foot right-of-way (ROW) pipeline corridors on the Fort Berthold Reservation. The ROW would consist of a 50-foot permanent ROW and a 50-foot temporary construction ROW. The pipelines are proposed to be positioned in the following locations:

- Mandaree 2-09 (North Corridor): T149N, R94W, SW ¼ of Section 4, NE ¼ Section 8, and NW ¼ Section 9
- Mandaree 5-16 (South Corridor): T149N, R94W, SW ¼ Section 9

Please refer to *Figure 1, Project Location Map*.

¹ The Bakken contains about 169 billion barrels of oil and the Three Forks contains about 20 billion barrels; however, most of this is not expected to be developed.

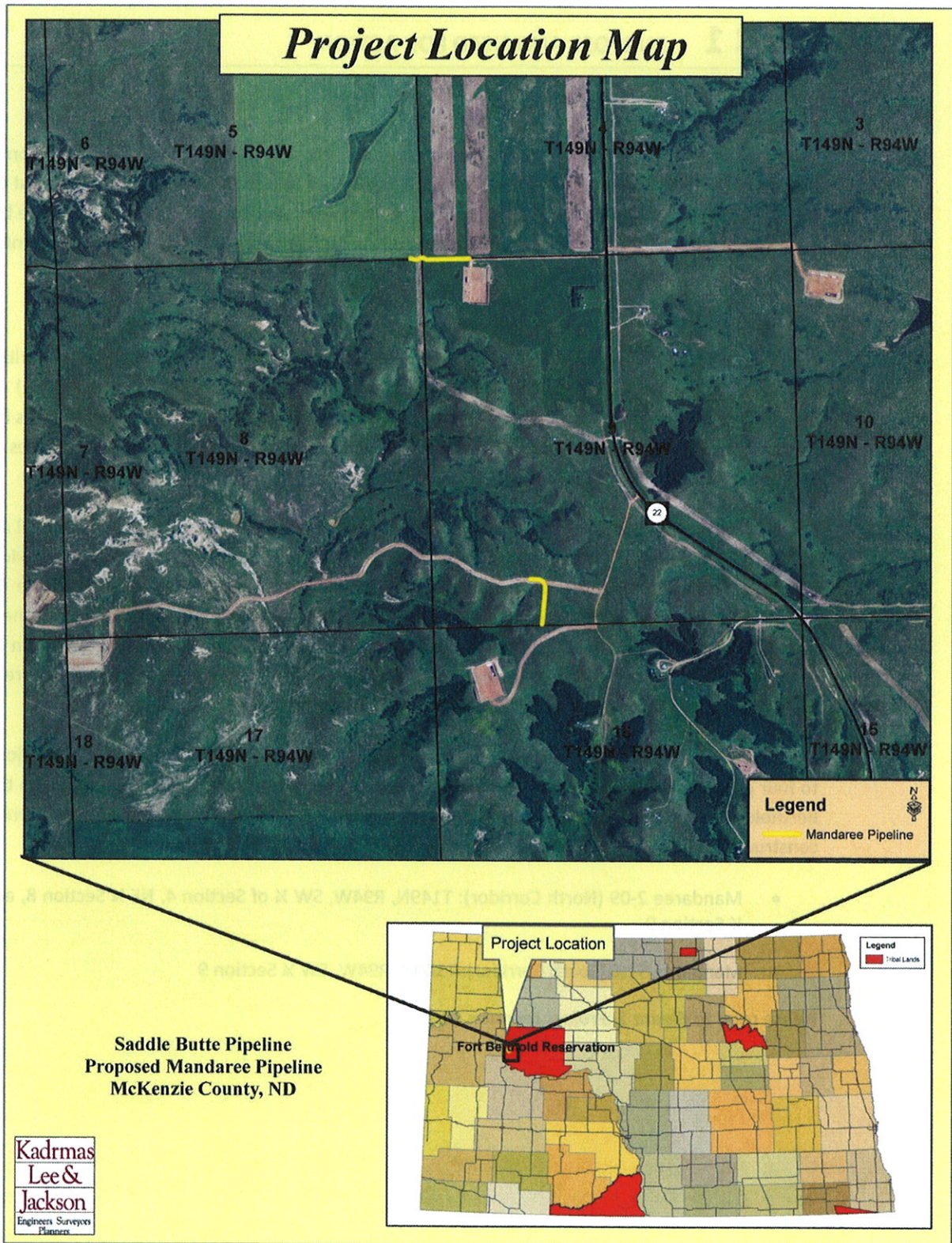


Figure 1, Project Location Map

Each pipeline corridor would include up to four gas, oil and/or water pipelines, with oil/gas pipelines up to eight inches in diameter and water pipelines up to six inches in diameter. The north pipeline corridor would tie into a previously approved pipeline on Fee land. The south pipeline corridor would tie into a previously approved pipeline on Tribal land and would continue south on fee property to a nearby well. The total length of pipeline corridor located on tribal land and evaluated in this EA would be 860 feet from the north line and 812 feet from the south line. The proposed action would provide infrastructure to collect oil, gas, and water from multiple well pads operated by EOG Resources, Inc., and transport it to previously approved pipelines operated by Saddle Butte Pipeline.

1.3 Need for the Proposed Action

The Tribes own their mineral resources, which are held in trust by the United States government through the BIA. The BIA's approval of the proposed pipelines would provide important benefits to the Three Affiliated Tribes, including revenue that could contribute to the Tribal budgets, satisfy Tribal obligations, and fund land purchase programs to stabilize its land base. It would also provide individual members of the Tribes with needed employment and income.

Furthermore, the proposed action gives the United States an opportunity to reduce its dependence on foreign oil and gas by aiding production from domestic sources of oil and gas.

1.4 Purpose of the Proposed Action

The purpose of the proposed action is to allow the Three Affiliated Tribes to provide for oil and gas development on the identified lands on the Fort Berthold Reservation. Additionally, the purpose is to reduce waste of valuable resources associated with continued flaring of produced natural gas and to reduce environmental and public health and safety concerns.

1.5 Regulations that Apply to Oil and Gas Development Activities

The BIA must comply with NEPA before it issues a determination of effect regarding environmental resources. Therefore, an EA for the pipelines is necessary to analyze the direct, indirect, and cumulative impacts of the proposed project.

Oil and gas development activities on Indian lands are subject to a variety of federal environmental regulations and policies under authority of the BIA and BLM. This inspection and enforcement authority derives from the United States trust obligations to the Tribes, the Indian Mineral Leasing Act of 1938, the Indian Mineral Development Act of 1982, and the Federal Oil and Gas Royalty Management Act of 1982. Under the BIA's regulations at 25 CFR Part 225, the BLM exercises authority over oil and gas development on Tribal lands under its implementing regulations at 43 CFR Part 3160 and its internal supplemental regulations and policies. The BLM's authority includes the inspection of oil and gas operations to determine compliance with applicable statutes, regulations, and all applicable orders. These include, but are not limited to, conducting operations in a manner which ensures the proper handling, measurement, disposition, and site security of leasehold production; and protecting other natural resources, environmental quality, life, and property.

CHAPTER 2 ALTERNATIVES

2.1 Introduction

This chapter provides information on the development and evaluation of project alternatives. The development of alternatives is directly related to the purpose and need for the project. Two alternatives are being considered for this project: a no action alternative and a proposed action alternative.

2.2 Alternative A: No Action

Under the no action alternative (Alternative A), the BIA would not approve the proposed ROW acquisition and construction of the proposed pipelines. The flaring of gas would continue at the oil and gas well pads intended to connect to the proposed pipelines, with greater environmental impact (air emissions) than if the heavy hydrocarbons were recovered. Valuable natural resources would continue to be lost through flaring rather than being brought to market, and corresponding royalty payments would be lost. In addition, natural resources would continue to be used to haul oil and gas from the wells.

2.3 Alternative B: Proposed Action

The proposed action (Alternative B) includes authorization by the BIA to install up to eight oil, gas and/or water pipelines in two pipeline corridors (four pipelines per location) to move produced gas and liquids to a suitable processing location. Approval of the proposed pipelines include above ground apparatuses, such as installation of valve sets, launchers, receivers and cathodic protection equipment. The proposed action also includes approval by the BIA for the acquisition of a 100-foot ROW consisting of a 50-foot permanent and a 50-foot temporary ROW within the Fort Berthold Reservation.

Intensive, pedestrian resource surveys of the proposed pipeline corridors were conducted on June 28, 2011 by Kadrmas, Lee & Jackson (KL&J). The purpose of these surveys was to gather site-specific data and photos with regards to botanical, biological, threatened and endangered species, eagles, and water resources. A 200-foot wide pipeline corridor was evaluated for each site. In addition, a 0.50 mile wide buffer around all project disturbance areas was used to evaluate the presence of eagles and eagle nests. Resources were evaluated using visual inspection and pedestrian transects across the sites.

A BIA-facilitated EA on-site assessment of the pipeline corridors was also conducted on June 28, 2011. The BIA Environmental Protection Specialist, as well as representatives from the Tribal Historic Preservation Office (THPO), Saddle Butte Pipeline (Saddle Butte), and KL&J were present. During the assessment, construction suitability with respect to topography, stockpiling, drainage, erosion control, and other surface issues were considered. Those present at the on-site assessment agreed that the chosen location is positioned to minimize impacts to sensitive wildlife and botanical resources and that the environmental commitments Saddle Butte Pipeline has made would further minimize harm to the environment. In addition, comments received from the United States Fish and Wildlife Service (USFWS) have been considered in the development of this project.

2.4 Construction and Plan Specifications

Construction of the proposed pipelines is expected to take approximately 90 days and would be confined within a 100-foot wide ROW consisting of a 50-foot permanent and 50-foot temporary ROW as shown previously in *Figure 1, Project Location Map*. Pipeline materials would be staged at existing well pads or trucked directly to the temporary ROW corridor on existing federal, state, county, Tribal, and private roads. Access to the ROW would be made at well pads and existing roadway crossing points only. Traffic at access points is expected to be heavy during brief periods at the beginning and end of shift and heavy at various times during the day when equipment and materials are delivered to the site. Traffic would be confined to the marked pipeline ROW corridor. Vehicle and personal travel off the pipeline ROW would be strictly prohibited at all times. Signs would be installed at access points to remind operators that access or travel off the pipeline ROW is not permitted.

Installation of the pipelines may require clearing and grading of 100-foot wide sections at locations within the ROW along the entire pipeline corridor. Every effort would be made to minimize surface disturbance during the construction process. Topsoil would be separated and stockpiled along either side of any disturbed cross section to be used for prompt reseeding and reclamation of the disturbed area. Continued use of pasture and livestock grazing areas would be maintained during construction via use of temporary fencing or cattle guards when crossing land with livestock present. Trenches would be excavated to a depth sufficient to maintain a minimum of 48 inches of ground coverage over the pipeline. ***Typical ROW Cross Section is as shown in Figure 2.***

The south line crosses a gravel roadway used exclusively for oil and gas related activities. Crossing this roadway would be accomplished via trenching, requiring the roadway to be temporarily closed off to all traffic. Proper soil compaction and maintenance of the roadway crossing would be completed immediately following construction. Saddle Butte Pipeline would need to obtain approval from lease holder prior to any roadway groundwork. In addition, the proposed pipelines may cross telephone, cable or other utility lines. Any line crossing conflicts would be worked out individually at each location with the respective utility.

All Saddle Butte installations are monitored by an inspection/construction management team as well as independent third party contract experts. Saddle Butte's construction specifications require contractors to allow for inspection, and no pipeline is laid and backfilled without appropriate approvals. Hydrotesting of pipelines would be used to assure no possibility of leakage at the time of installation.

During construction, the entire distance of trench could be open for several days during excavation, stringing, bending and installation of the pipelines. Crossings would be created at access locations and driveways. Pipe would be strung along the trench as bending, welding and other installation preparations were completed. After the pipelines were lowered into the trench they would be hydro-tested with water acquired from an approved source. Water used for hydro-testing would be removed from the site and/or disposed of at a permitted location or in an acceptable manner.

After the trench is backfilled, disturbed areas would be re-graded to original contours, stockpiled topsoil re-spread over the ROW, pipeline marking signs would be installed, and reclamation would be finalized. Proper soil compaction and maintenance of the roadway crossing would be completed immediately following construction.

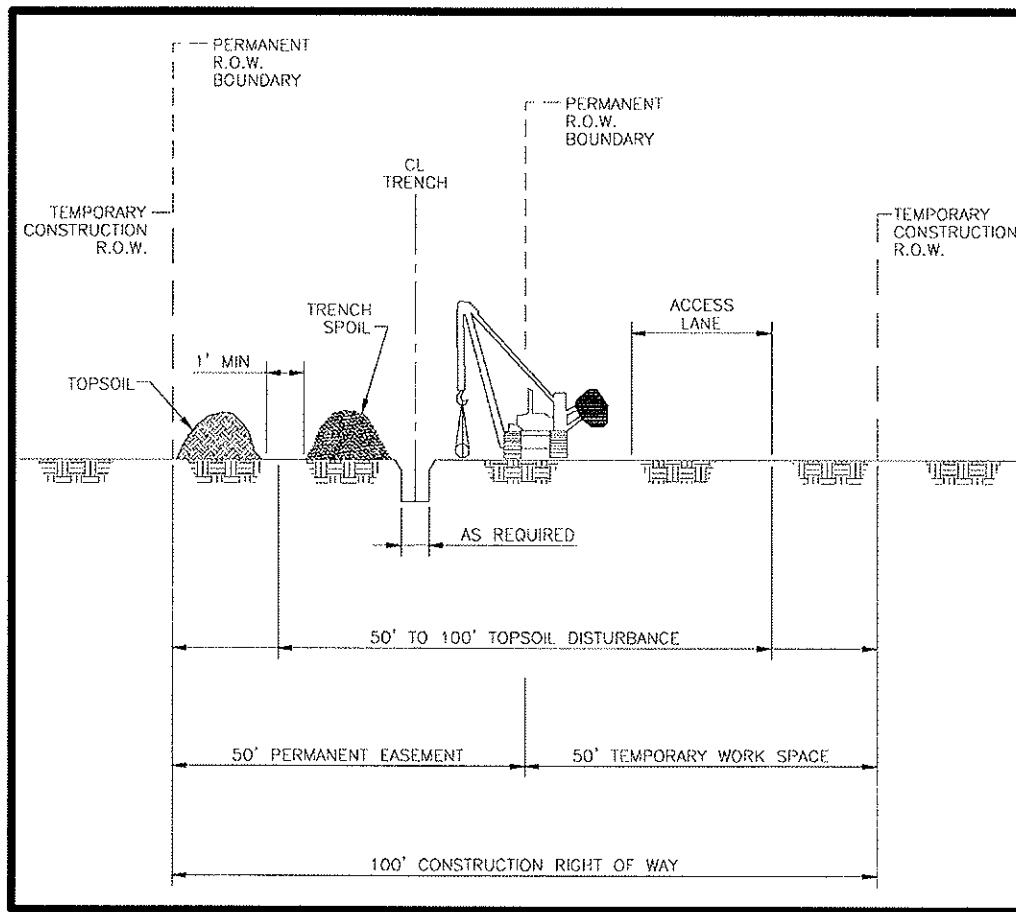


Figure 2, Typical ROW Cross Section

2.5 Reclamation

All reclamation is the responsibility of Saddle Butte Pipeline as the ROW permit holder. Reclamation shall be required after initial construction, after additional lines are installed, after any maintenance activity, and after final abandonment of a decommissioned line.

Regrading, contouring, and reseeding of disturbed areas would occur as soon as practical after construction but no later than the next appropriate planting season. The ROWs would be reseeded with certified seed mixtures approved by the BIA. All reseeding and planting would comply with BIA directions to ensure successful reclamation. Further, the ROWs would be monitored for areas of excessive erosion and subsidence. Periodic monitoring would be performed and repeated reclamation efforts would be undertaken in problem areas until the ROWs are certified as reclaimed.

For locations that are reclaimed in winter months or late fall such that no germination is possible, Saddle Butte will either use a sprayed reinforcement, lain matting reinforcement, spread and crimp straw and/or will minimize erosion issues with straw wattle and silt fence through winter months. Any temporary reclamation measures will remain until Saddle Butte can completely reclaim and revegetate the property in the spring. All temporary reclamation measures will be inspected on a

monthly basis, or more frequently as necessary, throughout the winter. In addition, Saddle Butte will also install straw bales on slopes as needed to provide erosion breaks.

Decommissioning of pipelines would result in mandatory final reclamation of the corridor. All surface facilities would be removed. Compacted areas would be scarified, ripped, and re-contoured. All areas would be re-contoured to match topography of the original landscape as closely as possible and re-seeded with vegetation consistent with surrounding native species to ensure a healthy and diverse mix free of noxious weeds. Stockpiled topsoil would be redistributed and re-vegetated. Long-term monitoring would be required to ensure successful reclamation and implementation of any necessary remedial efforts. The pipelines would be purged with water to remove hydrocarbons, capped, and abandoned in place.

2.6 Operation and Maintenance

After construction is complete, maintenance activities would be restricted to the 50-foot permanent ROW width. Access to these sections of the lines would be confined to existing roadways and as permitted by landowners. Excessive rutting or other surface disturbances, such as installing additional lines, would be immediately repaired and reclaimed under guidelines from the previous section. If any surface damage occurs that affects crops or other surface activities, repairs would be made immediately. Landowners would be compensated for damages accordingly.

Repair, replacement, inspection or additional lines that require extensive excavation may require ROW increased to 100 feet on a temporary basis. In that event, the BIA would be notified immediately. In the case of an emergency, the BIA may be notified during or after repairs have begun. In all cases, BIA would be consulted as soon as possible. All applicable regulations and best management practices would be followed.

As current estimates expect the Bakken field to remain active for 30 to 40 years, it is important that pipeline systems are designed to perform for this period of time. Pipelines, if designed effectively and well maintained, may have an indefinite life expectancy.

To ensure their long-term viability, all pipelines would be coated with between 14-16 mils of fusion bonded epoxy coating, which helps protect the pipelines against corrosive elements in the soil. The coating would be inspected thoroughly at the time of installation, both visually and by electronic testing means. Saddle Butte also utilizes specialty coatings that are applicable for underground fittings, bore crossings, etc. to provide additional levels of protection in areas that require it. Velocities and pressure drops for the pipeline system are carefully evaluated and lines are sized so as to prevent erosion velocity. Additionally, lines are designed to be cleaned and inspected via internal tools (e.g., cleaning pigs and smart pigs), which helps in the identification of issues in the pipes.

Following design and installation, Saddle Butte would immediately conduct a cathodic survey utilizing test stations, rectifier pads and other means designed by cathodic protection specialists. Saddle Butte would also install pig launchers and receivers on its trunk lines and primary laterals to identify pipeline conditions both internally and externally to maintain the integrity of the pipeline system.

2.7 Preferred Alternative

The preferred alternative is to complete all administrative actions and approvals necessary to authorize or facilitate the installation of the pipelines in order to protect the environment, reduce public hazards, and increase economic gain associated with production of oil and gas.

CHAPTER 3 DESCRIPTION OF THE AFFECTED ENVIRONMENT AND IMPACTS

3.1 Introduction

This chapter describes the existing conditions within the study area. The existing conditions, or affected environment, are the baseline conditions that may be affected by the proposed action. This chapter also summarizes the positive and negative direct environmental impacts of the project alternatives, as well as cumulative impacts. Indirect impacts are discussed in impact categories where relevant. Information regarding the existing environment, potential effects to the environment resulting from the proposed alternatives, and avoidance, minimization, and/or mitigation measures for adverse impacts is included.

3.2 Climate, Geologic Setting, and Land Use

Located in west-central North Dakota, the Fort Berthold Indian Reservation is home of the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara nations. With the completion of the Garrison Dam in 1945 and the subsequent creation of Lake Sakakawea, the Reservation was separated into three sections. Today, the Reservation occupies sections of six counties (Dunn, McKenzie, McLean, Mercer, Mountrail, and Ward) and encompasses approximately 988,000 acres. About half of the Reservation land is held in trust by the United States for the Three Affiliated Tribes or individual allottees.

Land surface within McKenzie County is primarily within the Missouri Plateau Ecoregion, which is where the proposed project is located. The Missouri Plateau Ecoregion consists of glaciated uplands, river breaks, valley wall sites and footslopes, coulees, alluvial terraces, and floodplains. The floodplains are primarily located in the bottomlands of the Missouri River. Annual precipitation on the plateau averages between 15 and 17 inches. Mean temperatures fluctuate between -3° and 21° F in January and between 55° and 83° F in July, with 95 to 130 frost-free days each year.

According to data collected by the Natural Resources Conservation Service from 1971–2000 at Dunn Center, temperatures in excess of 80 degrees Fahrenheit are common in summer months. The area receives approximately 16.5 inches of rain annually, predominantly during spring and summer. Winters in this region are cold, with temperatures often falling below zero degrees Fahrenheit. Snow generally remains on the ground from November to March, and approximately 38.5 inches of snow are received annually. Data collected at Keene, located in McKenzie County, during the same time span contains the same general weather patterns as Dunn Center. However, at Keene annual rainfall was approximately 16.0 inches and snow received annually is approximately 32.4 inches.

The proposed project is located within a predominantly rural area. Land within the pipeline corridors is primarily grassland/rangeland, with grazing being the primary land use. In addition, the landscape has been previously disturbed by dirt trails and gravel roadways. According to National Agricultural Statistics Services (NASS) data, land within the proposed project area is comprised of grassland and cultivated land. Please refer to *Figure 3, Land Use*.

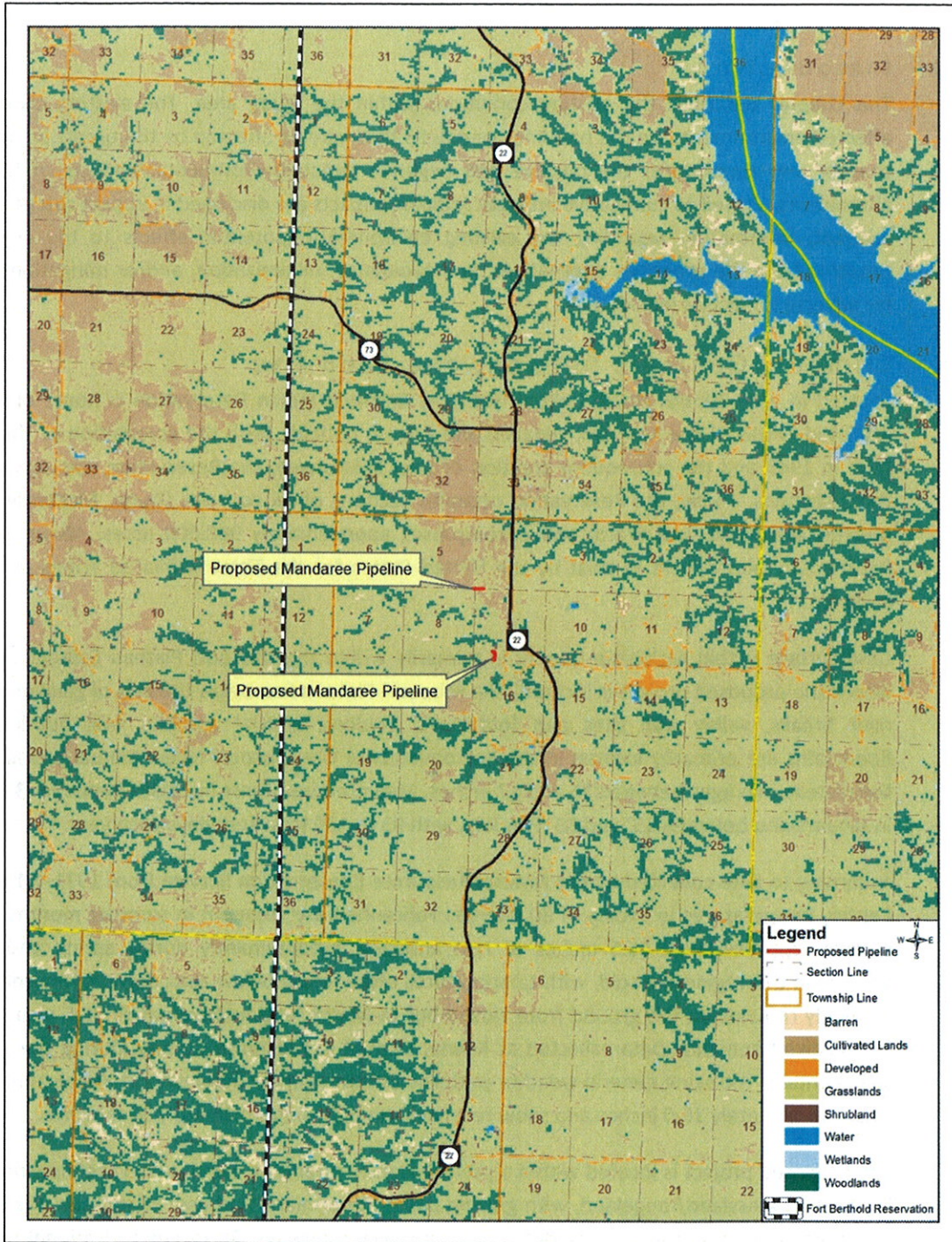


Figure 3, Land Use

3.2.1 Climate, Geologic Setting and Land Use Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact land use, climatic conditions, or geological setting.

Alternative B (Proposed Action)—Alternative B would result in the conversion of approximately 3.84 acres of land from its present use into a pipeline corridor. The pipelines would be buried underground and the majority of land uses would be able to resume following construction and reclamation activities. Some activities, such as those associated with developed lands, may be restricted within the 50-foot permanent right-of-way. Impacts to the geological setting and paleontological resources are not anticipated.

3.3 Soils

The Natural Resources Conservation Service (NRCS) Soil Survey of McKenzie County dates from 1999, with updated information available online through the NRCS Web Soil Survey. There are four soil types identified with the project impact areas. Location and characteristics of these soils are identified in *Table 1, Soils*.

Table 1, Soils

LOCATION	MAP UNIT SYMBOL	SOIL NAME	PERCENT SLOPE	COMPOSITION (IN UPPER 60 INCHES)			EROSION FACTOR		HYDROLOGIC SOIL GROUP
				% SAND	% SILT	% CLAY	T	KF	
North Line	41B	Williams-Bowbells Loam	3 to 6	34.8	35.2	30.0	5	.28	B
	42C	Williams loam	6 to 9	34.8	35.2	30.0	5	.28	B
	88C	Williams-Zahl loam	6 to 9	35.0	35.2	30.6	5	.28	B
South Line	63C	Vebar-Flasher complex	6 to 9	75.4	14.8	9.8	3	.24	B

All of the soils listed have moderate susceptibility to sheet and rill erosion. In addition, all of the soils can tolerate high to moderated levels of erosion without loss of productivity. Each of these soils is well drained and depth of the water table is generally recorded at greater than six feet for each soil type. None of the soils listed within the project areas are susceptible to flooding or ponding.

3.3.1 Soil Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact soils.

Alternative B (Proposed Action)—Construction of the proposed pipelines would disturb subsoil and topsoil within the project areas. Soil impacts would be localized, and BMPs would be implemented to minimize these impacts. Surface disturbance caused by pipeline construction would result in the

² Erosion Factors indicate susceptibility of a soil to sheet and rill erosion by water. Kf indicates the erodibility of material less than two millimeters in size. Values of K range from 0.02 to 0.69. Higher values indicate greater susceptibility. T Factors estimate maximum average annual rates of erosion by wind and water that will not affect crop productivity. Tons/acre/year range from 1 for shallow soils to 5 for very deep soils. Soils with higher T values can tolerate higher rates of erosion without loss of productivity.

³ Hydrologic Soil Groups (A, B, C, and D) are based on estimates of runoff potential according to the rate of water infiltration under the following conditions: soils are not protected by vegetation, soils are thoroughly wet, and soils receive precipitation from long-duration storms. The rate of infiltration decreases from Group A (high infiltration, low runoff) to D (low infiltration, high runoff).

removal of vegetation from the soil surface. This can damage soil crusts and destabilize the soil. As a result, the soil surface could become more prone to accelerated erosion by wind and water. BMPs used at the site to reduce these impacts would include erosion and sediment control measures during and after construction, segregating topsoil from subsurface material for future reclamation, chipping any woody vegetation that is removed on-site and incorporating it into topsoil stockpiles or removal of material offsite to an acceptable location, re-seeding of disturbed areas immediately after construction activities are completed, the use of construction equipment appropriately sized to the scope and scale of the project, and maintaining proper drainage. According to discussions at the field on-site assessment and standard industry practices, BMPs identified in the BLM Gold Book shall be utilized, to further minimize site erosion.

Another soil resources issue is soil compaction, which can occur by use of heavy equipment. When soil is compacted, it decreases permeability and increases surface runoff. This is especially evident in silt and clay soils. In addition, soils may be impacted by mixing of soil horizons. Soil compaction and mixing of soil horizons would be minimized by the previously discussed topsoil segregation. Disturbed areas would be reseeded following construction. No mitigation for soil impacts is anticipated.

Contamination of soils from various chemicals and other pollutants used during oil development activities is not anticipated. In the rare event that such contamination may occur, the event shall be immediately reported to the BLM, the NDIC, and where appropriate, the North Dakota Department of Health (NDDH). The procedures of the surface management agency shall be followed to contain spills and leaks. In addition, Saddle Butte Pipeline would be responsible for immediate remediation activities if an accidental release occurred.

3.4 Water Resources

The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, provides the authority to the Environmental Protection Agency (EPA) and the United States Army Corps of Engineers (USACE) to establish water quality standards, control discharges into surface and ground waters, develop waste treatment management plans and practices, and issue permits for discharges (Section 402) and for dredged or fill material (Section 404). Within the Fort Berthold Reservation, the Missouri River and Lake Sakakawea are both considered navigable waters and are therefore subject to Section 10 of the Rivers and Harbors Act of 1899.

The EPA also has the authority to protect the quality of drinking water under the Safe Drinking Water Act (SDWA) of 1974. As amended in 1986 and 1996, the SDWA requires many actions to protect drinking water and its sources: rivers, lakes reservoirs, springs, and ground water wells⁴.

3.4.1 Surface Water

The project areas are situated in the Great Plains region of North Dakota that borders the Badlands to the west. This is an arid area with few isolated surface water basins. The majority of the surface waters in the region are associated with the Missouri River, Lake Sakakawea, and tributaries to these water bodies. Surface water generally flows overland until draining into these systems.

⁴ The SDWA does not regulate private wells that serve fewer than 25 individuals.

The proposed pipelines are located in the Lake Sakakawea basin, meaning surface waters within this basin drain to Lake Sakakawea. Watershed and Sub-Watershed information for both lines are identified in *Table 2, Watersheds and Sub-Watersheds*.

Table 2, Watersheds and Sub-Watersheds

NAME	WATERSHED	SUB-WATERSHED
North Line	Independence Point	Boggy Creek
South Line	Waterchief Bay	Upper Squaw Creek

Runoff throughout the project areas is by sheet flow until collected by ephemeral and perennial streams draining to Lake Sakakawea. Please refer to *Figure 4, Surface Water Resources*. Surface runoff for each line would typically travel to Lake Sakakawea via drainage patterns as follows:

- North Line – Runoff would flow north by sheet flow approximately 0.6 miles before entering a wooded draw. Once in the draw, it would flow generally east before emptying into Lake Sakakawea. Total flow distance would be approximately 6.2 miles
- South Line – Runoff would initially flow west entering Squaw Creek. From there it would travel approximately 18.1 miles southeast to Lake Sakakawea.

3.4.1.1 *Surface Water Impacts/Mitigation*

Alternative A (No Action)—Alternative A would not impact surface water.

Alternative B (Proposed Action)—No significant impacts to surface water are expected to result from alternative B. The proposed project has been sited to avoid direct impacts to surface water and to minimize the disruption of drainage patterns across the landscape. Implementation of BMPs to control erosion would mitigate runoff of sediment downhill or downstream.

Two types of valves would be utilized for spill isolation:

- Check valves would be installed between trunk lines and lateral lines to prevent a “back feed” scenario to a spill, thereby limiting the volume of any spill to the wells that are directly contributing to it.
- Manual valve sets would also be installed at all intersections of laterals to trunk lines, allowing isolation at the wells themselves.

Saddle Butte has also developed a GIS database that establishes real time, web-based maps for use by its operations team and first responder personnel. In addition, Saddle Butte has provided options in its trunk lines for automatic isolation based on low pressure switching devices once the system pressure exceeds 1400 psi. These valves will automatically isolate the pipeline under most line rupture circumstances. Based on these mitigation measures, Alternative B is not anticipated to result in measurable increases in runoff or impacts to surface waters.



Figure 4, Surface Water Resources

3.4.2 Ground Water

The North Dakota State Water Commission's electronic records reveal that there are no active or permitted groundwater wells within one-mile of the proposed pipeline corridors. The Ft. Union Aquifer and Squaw Creek Aquifer are located approximately 1-mile south of the proposed south pipeline corridor and the Keene Aquifer is located approximately 5 miles to the northwest of the north pipeline corridor. There have been no sole source aquifers identified within North Dakota. Please refer to *Figure 5, Aquifers and Groundwater Wells*.

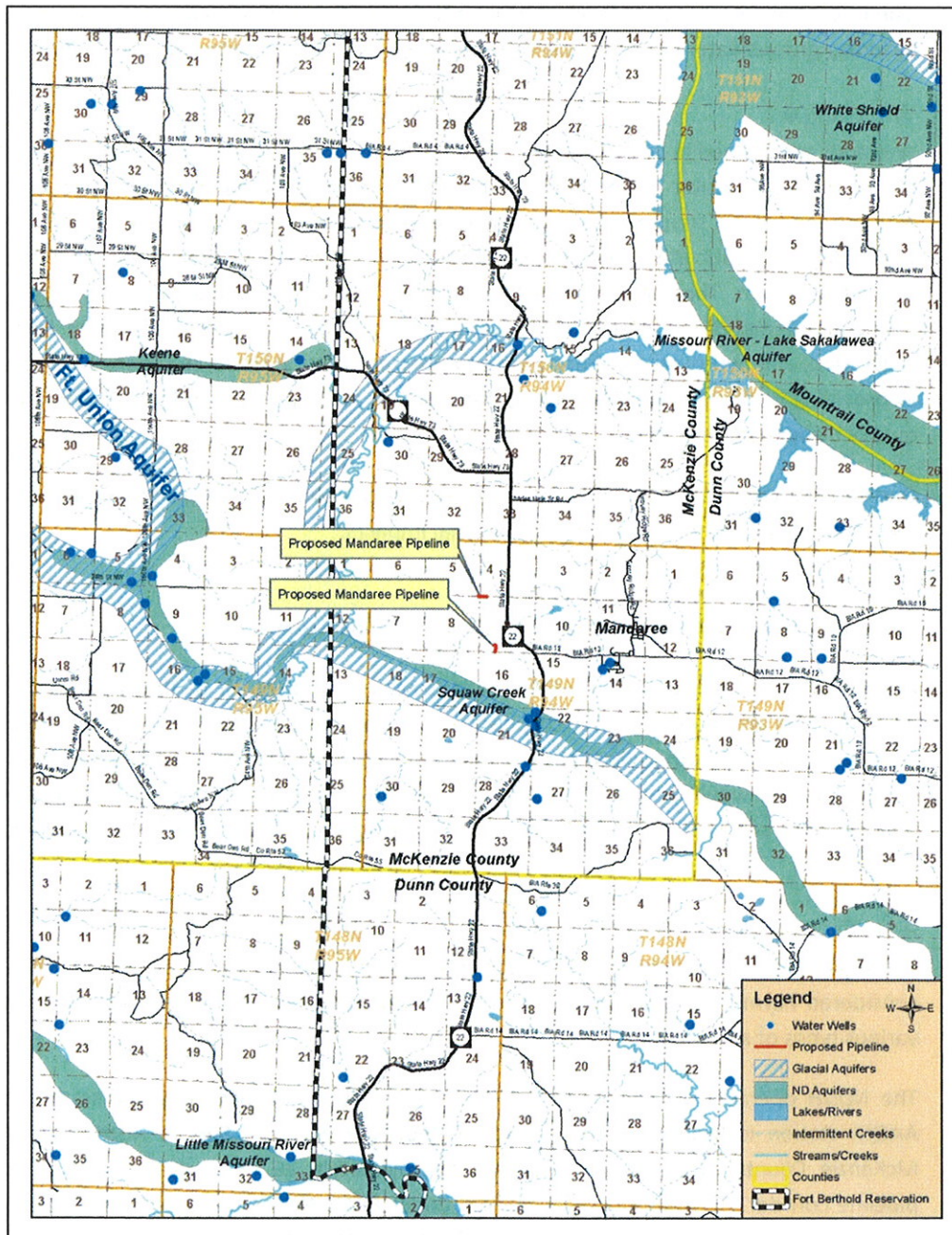


Figure 5, Aquifers and Groundwater Wells

3.4.2.1 Ground water Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact groundwater.

Alternative B (Proposed Action)— Saddle Butte's standard bore depth beneath an actively eroding drainage area is eight feet. However, bores are designed on a case by case basis to avoid any adverse effects of the natural surface in the vicinity of the bore. Additionally, bore pipe would be coated with abrasion resistant coating that provides substantial abrasion resistance if a large erosion or flooding event occurs.

Due to drilling and casing methods to isolate the well from groundwater no impacts to groundwater, including groundwater wells and aquifers, are expected to result from Alternative B.

3.5 Wetlands

Wetlands are defined in both the 1977 Executive Order 11990, Protection of Wetlands, and in Section 404 of the Clean Water Act of 1986, as those areas that are inundated by surface or ground water 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. Three parameters that define a wetland, as outlined in the Federal Manual for Delineating Jurisdictional Wetlands (US Army Corps of Engineers, 1987), are hydric soils, hydrophytic vegetation, and hydrology. Wetlands are an important natural resource serving many functions, such as providing habitat for wildlife, storing floodwaters, recharging ground water, and improving water quality through purification.

One wetland was located north of the northern pipeline corridor. The proposed pipeline corridor was rerouted around the wetland to avoid potential impacts.

3.5.1 Wetland impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact wetlands.

Alternative B (Proposed Action)—One wetland was located north of the proposed north pipeline corridor. The proposed pipeline corridor was routed around this wetland, eliminating potential wetland impacts. No other wetlands were identified during the field surveys. Silt fence, straw wattles or other BMP's would be placed around the identified wetland to help alleviate potential wetland impacts from soil erosion from the pipeline construction corridor. Alternative B would not impact wetlands.

3.6 Air Quality

The Clean Air Act, as amended, requires the EPA to establish air quality standards for pollutants considered harmful to public health and the environment by setting limits on emission levels and various types of air pollutants.

The NDDH operates a network of Ambient Air Quality Monitoring (AAQM) stations. The nearest AAQM station is located at the Theodore Roosevelt National Park – North Unit (TRNP-NU) in McKenzie County, North Dakota; located approximately 26 miles west-southwest of the south pipeline corridor. Criteria pollutants tracked under EPA's National Ambient Air Quality Standards in the Clean Air Act include sulfur dioxide (SO₂), particulate matter (PM), nitrogen dioxide (NO₂), ozone (O₃), lead (Pb) and carbon monoxide (CO). In addition, the NDDH has established state air quality standards. State standards must be as stringent as (but may be more stringent than) federal

standards. Please refer to *Table 3, Federal and State Air Quality Standards and Reported Data for TRNP-NU* (EPA 2006, NDDH 2009, NRP-NU 2009).

Table 3, Federal and State Air Quality Standards and Reported Data for TRNP-NU

POLLUTANT	AVERAGING PERIOD	EPA AIR QUALITY STANDARD		NDDH AIR QUALITY STANDARD		TRNP-NU 2009 REPORTED DATA	
		MG/M ³	PARTS PER MILLION	MG/M ³	PARTS PER MILLION	MG/M ³	PARTS PER MILLION
SO ₂	24-Hour	365	0.14	260	0.099	—	0.004
	Annual Mean	80	0.030	60	0.023	—	0.0006
PM ₁₀ ⁵	24-Hour	150	—	150	—	44.0	—
	Annual Mean	50	—	50	—	9.2	—
PM _{2.5} ⁶	24-Hour	35	—	35	—	14.9	—
	Weighted Annual Mean	15	—	15	—	3.0	—
NO ₂	Annual Mean	100	0.053	100	0.053	—	0.0010
CO	1-Hour	40,000	35	40,000	35	—	—
	8-Hour	10,000	9	10,000	9	—	—
Pb	3-Month	1.5	—	1.5	—	—	—
O ₃	1-Hour	240	0.12	235	0.12	—	0.062
	8-Hour	—	0.08	—	0.08	—	0.058

North Dakota was one of thirteen states in 2009 that met standards for all criteria pollutants. The state also met standards for fine particulates and the eight-hour ozone standards established by the EPA (NDDH, 2009).

In addition, the Fort Berthold Reservation complies with the North Dakota National Ambient Air Quality Standards and visibility protection. The Clean Air Act affords additional air quality protection near Class I areas. Class I areas include national parks greater than 6,000 acres in size, national monuments, national seashores, and federally designated wilderness areas larger than 5,000 acres designated prior to 1977. There are no Federal Class I areas within the project area. The Theodore Roosevelt National Park is the nearest Class I area, located approximately 25.8 miles west-southwest of the project area.

3.6.1 Air Quality Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact air quality.

Alternative B (Proposed Action)—The Fort Berthold Reservation complies with North Dakota National Ambient Air Quality Standards and visibility protection. The Clean Air Act affords additional air quality protection near Class I areas. Class I areas include national parks greater than 6,000 acres in size, national monuments, national seashores and federally designated wilderness areas larger than 5,000

⁵ PM₁₀ refers to particulates 10 micrometers (μ) or less in size.

⁶ PM_{2.5} refers to particulates 2.5 micrometers (μ) or less in size.

acres designated prior to 1977. The Theodore Roosevelt National Park is the nearest Class I area, located approximately 25.8 miles west-southwest of the project area.

The TRNP-NU AAQM station reported air quality data well below the state and federal standards. Alternative B would not include any major sources of air pollutants. Construction activities would temporarily generate minor amounts of dust and gaseous emissions of PM, SO₂, NO₂, CO and volatile organic compounds. Emissions would be limited to immediate project areas and are not anticipated to cause or contribute to a violation of National Ambient Air Quality Standards. No detectable or long-term impacts to air quality or visibility are expected within the airsheds of the forth Berthold Reservation, state, or North Unit of Theodore Roosevelt National Park.

The proposed project is anticipated to have a long-term benefit to air quality in the project area because it would reduce emissions associated with gas flaring. In addition, it would reduce truck traffic by moving the oil and gas through the lateral lines and into the main pipelines. In the long-term, this may improve air quality in the area by reducing mobile source air pollutants associated with trucking operations. No mitigation or monitoring measures are recommended.

3.7 Threatened, Endangered, and Candidate Species

In accordance with Section 7 of the Endangered Species Act (ESA) of 1973, 50 CFR Part 402, as amended, each federal agency is required to ensure the following two criteria. First, any action funded or carried out by such agency must not be likely to jeopardize the continued existence of any federally-listed endangered or threatened species or species proposed to be listed. Second, no such action can result in the destruction or adverse modification of habitat of such species that is determined to be critical by the Secretary. A threatened species is one that is likely to become endangered in the foreseeable future. An endangered species is in danger of extinction throughout all or a significant portion of its range. A candidate species is a plant or animal for which the USFWS has sufficient information on its biological status and threats to propose it as threatened or endangered under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. While candidate species are not legally protected under the ESA, it is within the spirit of the ESA to consider these species as having significant value and worth protecting.

The proposed action area was evaluated to determine the potential for occurrences of federally-listed threatened, endangered, and candidate species. The USFWS (September 2010) identified the piping plover as a threatened species for McKenzie County. The black-footed ferret, gray wolf, interior least tern, pallid sturgeon, and whooping crane are listed as endangered species that may be found within McKenzie County. The Dakota Skipper and Sprague's pipit are listed as candidate species. In addition, McKenzie County contains designated critical habitat for the piping plover adjacent to Lake Sakakawea. None of these species were observed in the field on the day of the survey. Habitat requirements, the potential for suitable habitat within the project areas, and other information regarding listed species for McKenzie County are included in the following section.

3.7.1 Threatened Species

Piping Plover (*Charadrius melodus*)

The piping plover is a small migratory shorebird. Historically, piping plovers could be found throughout the Atlantic Coast, 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 on the Missouri River system. Critical habitat includes reservoir reaches composed of sparsely vegetated shoreline beaches, peninsulas, islands composed of sand, gravel, or shale, and their interface with water bodies.

There is no existing or potential habitat within the project areas. According to USFWS data, designated critical habitat occurs through the entire shoreline of Lake Sakakawea. Lake Sakakawea is located approximately 4.2 miles northeast of the project area at its closest point (north line), or approximately 6.2 miles following the shortest drainage pattern to the lake (north line).

3.7.1.2 *Threatened Species Impacts/Mitigation*

Alternative A (No Action)—Alternative A would have no effect to the piping plover and would not destroy or adversely modify designated piping plover critical habitat.

Alternative B (Proposed Action)—Suitable habitat for the piping plover is largely associated with Lake Sakakawea and its shoreline. Potential habitat for these species exists approximately 4.2 miles northeast of the proposed project area (north line), or 6.2 miles away following the shortest drainage pattern to the lake (north line). The pipeline project area is located on upland bluffs and grassland, with Lake Sakakawea located below the bluffs. There is no potential habitat for the piping plover within the study area. The topographic features of the area and distance from the shoreline would assist in providing sight and sound buffers for shoreline-nesting birds. Due to the lack of potential habitat and distance from the lake, it is anticipated that the proposed action would have no impact to the piping plover. The proposed project is not likely to impact critical habitat for the piping plover.

3.7.2 Endangered Species

Black-Footed Ferret (*Mustela nigripes*)

The black-footed ferret historically could be found throughout the Rocky Mountains and Great Plains. In North Dakota, the black-footed ferret may potentially be present within prairie dog towns. However, this species has not been confirmed in North Dakota for nearly 30 years and is presumed to be extirpated. Its preferred habitat includes areas around prairie dog towns, as it relies on prairie dogs for food and lives in prairie dog burrows. Black-footed ferrets require at least an 80-acre prairie dog town to survive.

No prairie dog towns were observed within the proposed project area to provide suitable black-footed ferret habitat.

Gray Wolf (*Canis Lupis*)

The gray wolf is the largest wild canine species in North America. It is found throughout northern Canada, Alaska, and the forested areas of Northern Michigan, Minnesota, and Wisconsin and has been re-introduced to Yellowstone National Park in Wyoming. While the gray wolf is not common in North Dakota, occasionally individual wolves do pass through the state. Historically, its preferred habitat includes biomes such as boreal forest, temperate deciduous forest, and temperate grasslands. Gray wolves live in packs of up to 21 members, although some individuals will roam alone.

The project areas are located far from other known wolf populations.

Interior Least Tern (*Aterna antillarum*)

The interior least tern nests along inland rivers. The interior least tern is found in isolated areas along the Missouri, Mississippi, Ohio, Red, and Rio Grande Rivers. In North Dakota, it is sighted along the Missouri River during the summer breeding and nesting season. The interior least tern nests on sand bars or barren beaches, preferably in the middle of a river for increased safety while nesting. These birds nest close together, using safety in numbers to minimize predation.

There is no existing or potential habitat within the project area. Potential habitat in the form of sandy/gravelly Lake Sakakawea shoreline may exist approximately 4.2 miles northeast of the project area (north line).

Pallid Sturgeon (*Scaphirhynchus albus*)

The pallid sturgeon is known to exist in the Yellowstone, Missouri, middle and lower Mississippi and Atchafalaya Rivers, and seasonally in some tributaries. In North Dakota, the pallid sturgeon is found principally in the Missouri River and upstream of Lake Sakakawea in the Yellowstone River. Dating to prehistoric times, the pallid sturgeon has become well adapted to living close to the bottom of silty river systems. According to the USFWS, its preferred habitat includes “a diversity of water depths and velocities formed by braided river channels, sand bars, sand flats, and gravel bars” (2010, September 20). Weighing up to 80 pounds, pallid sturgeons are long lived, with individuals possibly reaching 50 years of age.

Potential habitat for pallid sturgeon can be found in Lake Sakakawea approximately 4.2 miles northeast of the project area (north line), or 6.2 miles following the shortest drainage pattern to the lake (north line).

Whooping Crane (*Grus Americana*)

The whooping crane is the tallest bird in North America. In the United States, this species ranges through the Midwest and Rocky Mountains regions from North Dakota south to Texas and east into Colorado. Whooping cranes migrate through North Dakota along a band running from the south central to the northwest parts of the state. They use shallow, seasonally and semi-permanently flooded palustrine (marshy) wetlands for roosting and various cropland and emergent wetlands for feeding. During migration, whooping cranes are often recorded in riverine habitats, including the Missouri River. Currently there are three wild populations of whooping cranes, yielding a total species population of about 383. Of these flocks, only one is self-sustaining.

According to the USFWS data, the proposed project is located in the Central Flyway where 95 percent of confirmed whooping crane sightings have occurred. A shallow wetland and crop field are located adjacent to the north pipeline corridor, which could provide roosting habitat and a food source.

3.7.2.2 Endangered Species Impacts/Mitigation

Alternative A (No Action)—Alternative A would have no effect to the gray wolf, black-footed ferret, interior least tern, pallid sturgeon, or whooping crane

Alternative B (Proposed Action)—Due to lack of preferred habitat characteristics and/or known populations, the proposed project is anticipated to have no effect on the black-footed ferret, gray wolf, interior least tern, or pallid sturgeon.

The proposed project is located within the Central Flyway where approximately 75 percent of confirmed whooping crane sightings have occurred. In addition, a shallow wetland and nearby cropland may provide roosting and feeding habitat within the vicinity of the north pipeline corridor. Due to the location of the project within the Central Flyway and available stopover and feeding habitat, the proposed project may affect but is not likely to adversely affect whooping cranes. If a whooping crane is sighted within one-mile of the pipeline corridors while under construction, all work would cease within one-mile of that part of the project and the USFWS would be contacted immediately on how to proceed.

3.7.3 Candidate Species

Dakota Skipper (Hesperia dacotae)

The Dakota skipper is a small butterfly with a one-inch wing span. These butterflies historically ranged from southern Saskatchewan, across the Dakotas and Minnesota, to Iowa and Illinois. The preferred habitat for the Dakota skipper consists of flat, moist bluestem prairies and upland prairies with an abundance of wildflowers. Dakota skippers are visible in their butterfly stage from mid-June to early July.

The proposed pipeline corridors are located on upland, mixed grass prairie areas with an abundance of wildflowers, which could contain potential habitat for the Dakota skipper. No Dakota skippers were observed during the field surveys.

Sprague's pipit (Anthus spragueii)

The Sprague's pipit is a small songbird found in prairie areas throughout the Northern Great Plains. Preferred habitat includes rolling, upland mixed-grass prairie habitat with high plant species diversity. The Sprague's pipit breeds in habitat with minimal human disturbance.

The proposed pipeline corridors occur on upland, mixed grass prairie areas with high plant species diversity, which could provide suitable habitat to the Sprague's pipit. No Sprague's pipits were observed during the field surveys.

3.7.3.2 Candidate Species Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact the Dakota skipper or Sprague's pipit.

Alternative B (Proposed Action)—The proposed pipeline corridors may contain suitable habitat for both the Dakota skipper and Sprague's pipit. Due to the presence of potential habitat for the Dakota skipper and Sprague's pipit within the project corridors, the proposed project may impact individuals or habitat through earthwork associated with construction activities, habitat conversion, and/or fragmentation. An "effect determination" under Section 7 of the Endangered Species Act has not been made due to the current unlisted status of the species.

3.8 Eagles

Protection is provided for the bald and golden eagle through the Bald and Golden Eagle Protection Act (BGEPA). The BGEPA of 1940, 16 U.S.C. 668-668d, as amended, 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. The BGEPA prohibits, except under certain specified conditions, the taking, possession, or commerce of bald and golden eagles. Under the BGEPA, to "take" includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb, wherein

“disturb” means to agitate or bother a bald or golden eagle to the degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, causing injury, death, or nest abandonment.

The bald eagle (*Haliaeetus leucocephalus*) is sighted in North Dakota along the Missouri River during spring and fall migration periods and periodically in other places in the state such as the Devils Lake and Red River areas. In 2009, the ND Game and Fish Department estimated that 66 nests were occupied by bald eagles, though not all eagle nests were visited and verified (February 2010). Preferred habitat for the bald eagle includes open areas, forests, rivers, and large lakes. Bald eagles tend to use the same nest year after year, building atop the previous year’s nest.

The golden eagle (*Aquila chrysaetos*) can be spotted in North Dakota throughout the badlands and along the upper reaches of the Missouri River in the western part of the state. Golden eagle pairs maintain territories that can be as large as 60 square miles and nest in high places including cliffs, trees, and human-made structures. They perch on ledges and rocky outcrops and use soaring to search for prey. Golden eagle preferred habitat includes open prairie, plains, and forested areas.

An intensive, pedestrian resource survey of the proposed pipeline corridors was conducted on June 28, 2011, by KL&J environmental specialists. In addition, a survey for eagles and eagle nests within 0.5 miles of all project disturbance areas was conducted. This survey consisted of pedestrian transects focusing specifically on potential nesting sites within 0.5 miles of project disturbance areas including cliffs and wooded draws. Wooded draws were observed both from the upland areas overlooking the draws and from bottomlands within the actual draws.

No bald eagles or golden eagles were observed within 0.5 miles of the proposed pipeline corridors during field surveys, nor were any nests observed.

The USGS Northern Prairie Wildlife Research Center maintains information on bald eagle and golden eagle habitat within the state of North Dakota. According to the USGS data, the 0.5-mile buffered survey area for each pipeline segment does contain recorded habitat for both the bald eagle and the golden eagle. In addition, Dr. Anne Marguerite Coyle of Dickinson State University has completed focused research on golden eagles and maintains a database of golden eagle nest sightings. According to Dr. Coyle’s information, the closest recorded golden eagle nest is located approximately 3.2 miles northwest of the proposed north line project location. Please refer to *Figure 6, Bald and Golden Eagle Habitat and Nesting Sites*.

3.8.1 Eagle Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact bald or golden eagles.

Alternative B (Proposed Action)—The proposed project is located within areas of recorded suitable bald and golden eagle habitat. However, no evidence of eagle nests were found within 0.5 miles of the project areas and no nest sightings have been recorded within 1 mile of the project areas. Therefore, no impacts to bald or golden eagles are anticipated to result from the proposed project. If a bald or golden eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.

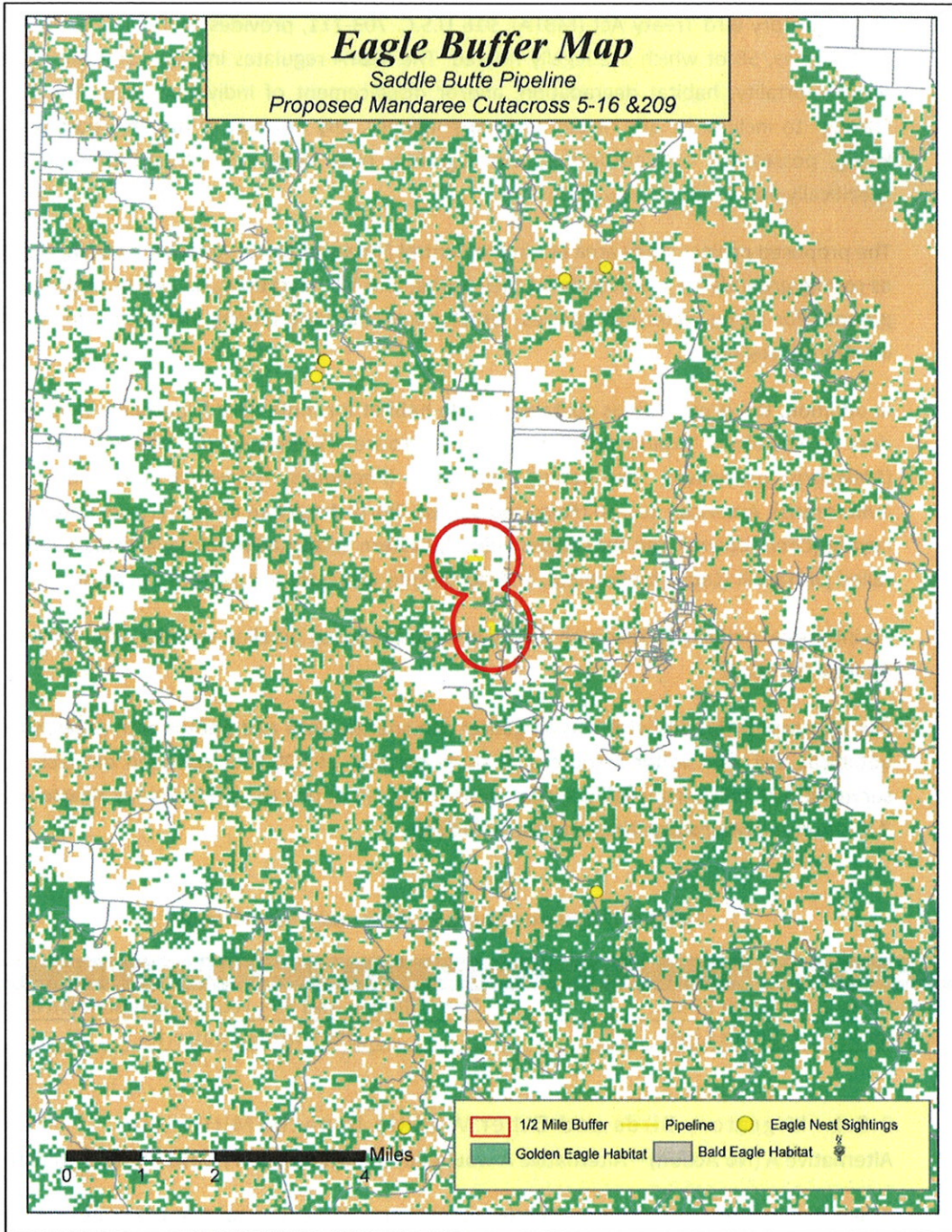


Figure 6, Bald and Golden Eagle Habitat and Nesting Sites

3.9 Migratory Birds and Other Wildlife

The Migratory Bird Treaty Act (MBTA), 916 U.S.C. 703-711, provides protection for 1,007 migratory bird species, 58 of which are legally hunted. The MBTA regulates impacts to these species such as direct mortality, habitat degradation, and/or displacement of individual birds. The MBTA defines “taking” to include by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof, except when specifically permitted by regulations.

The proposed project study area lies in the Central Flyway of North America. As such, this area is used as resting grounds for many birds on their spring and fall migrations, 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.

In addition, the project areas contain suitable habitat for mule deer (*Odocoileus hemionu*), whitetail deer (*Odocoileus virginianus*), sharp-tailed grouse (*Tympanuchus phasianellus*), wild turkey (*Meleagris gallopavo*), ring-necked pheasant (*Phasianus colchicas*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), North American badger (*Taxidea taxus*), song birds, coyote (*Canis latrans*), red fox (*Vulpes vulpes*), Eastern cottontail rabbit (*Sylvilagus floridanus*), white-tailed jackrabbit (*Lepus townsendii*), and North American porcupine (*Erethizon dorsatum*).

An intensive, pedestrian resource survey of each proposed pipeline corridor was conducted by KL&J on June 28, 2011.

The purpose of this site visit was to gather site-specific data and photos with regards to biological, botanical, soil, and water resources. A study corridor of 200 feet centered on each pipeline was surveyed. The following wildlife species were observed during the field surveys. **Please refer to Table 3.4, Observed Migratory Birds and Other Wildlife.**

Table 4, Observed Migratory Birds and Other Wildlife

PIPELINE NAME	SPECIES OBSERVED
Mandaree 209 (North Line)	Five Killdeer, and 50+ red-winged blackbirds
Mandaree5-16 (South Line)	Unidentified butterfly

3.9.1 Migratory Birds and Other Wildlife Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact migratory birds or other wildlife.

Alternative B (Proposed Action)—Due to the presence of suitable habitat at the project site for many wildlife and avian species, ground disturbance associated with the proposed project may impact individuals by displacing animals from suitable habitat. While many species of wildlife may continue to use the project areas for breeding and feeding and continue to thrive, the activities associated with oil and gas development may displace animals from otherwise suitable habitats. As a result, wildlife may be forced to utilize marginal habitats or relocate to unaffected habitats where population density and competition increase. Consequences of such displacement and competition may include lower survival, lower reproductive success, lower recruitment, and lower carrying capacity leading ultimately to population-level impacts. Therefore, the proposed project may impact individuals and

populations within these wildlife species, but is not likely to result in a trend towards listing of any of the species identified. As no grouse leks were observed in the project areas, additional timing restrictions for construction are not required.

The proposed pipelines are located on upland areas that are at a considerably higher elevation (approximately 520 feet) than the Lake Sakakawea shoreline. Additionally, the shortest distance to Lake Sakakawea is approximately 4.2 miles northeast (north line), or 6.2 miles following the shortest drainage pattern to the lake (north line). This distance, along with the topographic features of the area, would assist in providing sight and sound buffers for shoreline-nesting birds

During construction activities, the noise, movements, and increased activity associated with the pipeline installation are expected to deter wildlife from entering the area. These disturbances are expected to persist until project completion, at which time disturbance level would be greatly reduced.

In addition, design considerations would be implemented to further protect against potential habitat degradation. BMPs would be utilized to minimize wind and water erosion of soil resources, and when possible, pipelines would follow previously disturbed areas (roads) to minimize impacts to undisturbed habitat.

The proposed project is anticipated to begin construction in late 2011, outside of the Migratory bird breeding/nesting season (February 1 through July 15). If constructing is delayed until 2012, a qualified biologist would conduct pre-construction surveys for migratory birds or their nests within five days prior to the initiation of all construction activities or the project areas would be mowed the previous fall to deter birds from nesting in project areas. The findings of the pre-construction survey would be reported to the USFWS.

Additionally, all reasonable, prudent, and effective measures to avoid the taking of migratory bird species would be implemented during the construction and operation phases. The measures would include: the use of suitable mufflers on all internal combustion engines; certain compressor components to mitigate noise; and only utilizing approved roadways.

3.10 Vegetation

An intensive resource survey of botany species was conducted for the proposed pipeline corridors by KL&J. The purpose of this site visit was to gather site-specific data and photos with regard to botanical resources. A 200-foot study corridor centered on the proposed pipelines was surveyed. Botanical resources were evaluated using visual inspection. The pipeline corridors were also investigated for the presence of invasive plant species.

The Saddle Butte Pipeline Mandaree #209 pipeline corridor (north line) consisted primarily of non-native upland grasses. The site is located on a heavily grazed pasture with a vegetation composition dominated by Kentucky bluegrass (*Poa pratensis*) and smooth brome (*Bromus inermis*). The nearest wooded draw is located approximately 800-feet south of the proposed pipelines. No noxious weed species were observed in the corridor. There are no threatened or endangered plant species listed for McKenzie County. Please refer to *Figure 7, Grazed Pasture Land, View West*, for a visual overview of site vegetation.



Figure 7, Grazed Pasture Land, View West

The Saddle Butte Pipeline Mandaree #5-16 pipeline corridor (south line) consisted of native and non-native upland grasses and shrubs, located on grazed rangeland. Kentucky bluegrass, prairie junegrass (*Koeleria macrantha*), and little bluestem (*Schizachyrium scoparium*) dominated the corridor. Several patches of western snowberry (*Symphoricarpos occidentalis*) were present, with purple coneflower (*Echinacea purpurea*) and lambert crazyweed (*Oxytropis lambertii*) dispersed throughout. The nearest wooded draw is located approximately 300-feet west of the proposed pipeline corridor. For a visual overview of site vegetation please refer to **Figure 8, Grazed Rangeland, View South**, and **Figure 9, Rangeland with Wooded Draw, View West**.



Figure 8, Grazed Rangeland, View South



Figure 9, Rangeland with Wooded Draw, View West

In addition, the pipeline corridors were surveyed for the presence of noxious weeds. Of the 11 species declared noxious under the North Dakota Century Code (Chapter 63-01.0), seven are known to occur in McKenzie County. Please refer to *Table 5, Noxious Weed Species*. In addition, counties and cities have the option to add species to the list to be enforced within their jurisdictions. McKenzie County has chosen to add black henbane, common burdock, houndstongue, halogeton, and baby's breath to its list of enforced noxious weeds. No noxious weeds were identified in the study area.

Table 5, Noxious Weed Species

COMMON NAME	SCIENTIFIC NAME	2009 MCKENZIE COUNTY REPORTED ACRES
Absinth wormwood	<i>Artemisia absinthium L.</i>	15
Baby's breath	<i>Gypsophila paniculata</i>	—
Black henbane	<i>Hyoscyamus niger</i>	—
Canada thistle	<i>Cirsium arvense (L.) Scop</i>	33,600
Common burdock	<i>Arctium minus</i>	—
Dalmation toadflax	<i>Linaria genistifolia ssp. Dalmatica</i>	1
Diffuse Knapweed	<i>Centaurea diffusa Lam</i>	1
Halogeton	<i>Halogeton glomeratus</i>	—
Houndstongue	<i>Cynoglossum officinale</i>	—
Leafy spurge	<i>Euphorbia esula L.</i>	26,200
Musk thistle	<i>Carduus nutans L.</i>	—
Purple loosestrife	<i>Lythrum salicaria</i>	—
Russian knapweed	<i>Acroptilon repens (L) DC.</i>	—
Saltcedar (tamarisk)	<i>Tamarix ramosissima</i>	2,400
Spotted knapweed	<i>Centaurea maculosa Lam.</i>	5
Yellow toadflax	<i>Linaria vulgaris</i>	—

3.10.1 Vegetation Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact vegetation.

Alternative B (Proposed Action)—Ground clearing activities associated with construction of the proposed pipelines would result in vegetation disturbance; however, the areas of proposed surface disturbances are minimal in the context of the setting, and these impacts would be further minimized in accord with the BLM Gold Book standards for pipeline reclamation. Following construction, reclamation measures to be implemented include leveling, re-contouring, backfill, compacting fill, and re-seeding with a native grass seed mixture from a BIA/BLM-approved source. Erosion control measures would be installed as appropriate. Stockpiled topsoil would be redistributed and re-seeded as recommended by the BIA.

For locations that are reclaimed in winter months or late fall such that no germination is possible, Saddle Butte will either use a sprayed reinforcement, lain matting reinforcement, spread and crimp straw and/or will minimize erosion issues with straw wattle and silt fence through winter months. Any temporary reclamation measures will remain until Saddle Butte can completely reclaim and revegetate the disturbed area in the spring. All temporary reclamation measures will be inspected on a monthly basis, or more frequently as necessary, throughout the winter. In addition, Saddle Butte will also install BMP's on slopes as needed to provide erosion breaks.

Upon final abandonment of commercial operations, all disturbed areas would be promptly reclaimed. Regrading, contouring, and reseeded of disturbed areas would occur as soon as practical after construction but no later than the next appropriate planting season. All areas would be re-contoured to match topography of the original landscape as closely as possible and re-seeded with vegetation consistent with surrounding native species to ensure a healthy and diverse mix free of noxious weeds. Seed would be obtained from a BIA/BLM-approved source. Re-vegetation of the site would be consistent with the BLM Gold Book standards. Erosion control measures would be installed as appropriate in a manner that is consistent with the BLM Gold Book standards. Maintenance of the re-vegetated site would continue until such time that the stand was consistent with the surrounding undisturbed vegetation and the site free of noxious weeds. The surface management agency would provide final inspection of the site to deem the reclamation effort complete.

3.11 Cultural Resources

Historic properties, or cultural resources, on federal or tribal lands are protected by many laws, regulations and agreements. The National Historic Preservation Act of 1966 (16 USC 470 et seq.) at Section 106 requires, for any federal, federally assisted or federally licensed undertaking, that the federal agency take into account the effect of that undertaking on any district, site, building, structure or object that is included in the National Register of Historic Places (National Register) before the expenditure of any federal funds or the issuance of any federal license. Cultural resources is a broad term encompassing sites, objects, or practices of archaeological, historical, cultural and religious significance. Eligibility criteria (36 CFR 60.6) include association with important events or people in our history, distinctive construction or artistic characteristics, and either a record of yielding or a potential to yield information important in prehistory or history. In practice, properties are generally not eligible for listing on the National Register if they lack diagnostic artifacts, subsurface remains or structural features, but those considered eligible are treated as though they were listed on the National Register, even when no formal nomination has been filed. This process of taking into account an undertaking's effect on historic properties is known as "Section 106 review," or more commonly as a cultural resource inventory.

The area of potential effect (APE) of any federal undertaking must also be evaluated for significance to Native Americans from a cultural and religious standpoint. Sites and practices may be eligible for protection under the American Indian Religious Freedom Act of 1978 (42 USC 1996). Sacred sites may be identified by a tribe or an authoritative individual (Executive Order 13007). Special protections are afforded to human remains, funerary objects, and objects of cultural patrimony under the Native American Graves Protection and Repatriation Act (NAGPRA, 25 USC 3001 et seq.).

Whatever the nature of the cultural resource addressed by a particular statute or tradition, implementing procedures invariably include consultation requirements at various stages of a federal undertaking. The MHA Nation has designated a Tribal Historic Preservation Officer (THPO) by Tribal Council resolution, whose office and functions are certified by the National Park Service. The THPO operates with the same authority exercised in most of the rest of North Dakota by the State Historic Preservation Officer (SHPO). Thus, BIA consults and corresponds with the THPO regarding cultural resources on all projects proposed within the exterior boundaries of the Fort Berthold Reservation.

Cultural resource inventories of these pipeline route segments were conducted by personnel of Kadrmass, Lee & Jackson, Inc., using an intensive pedestrian methodology. Approximately 10.9 acres were inventoried

between June 8 and August 16, 2011 (Macy 2011). No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.6) for inclusion on the National Register. As the lead federal agency, and as provided for in 36 CFR 800.5, on the basis of the information provided, BIA reached a determination of no historic properties affected for this undertaking. This determination was communicated to the THPO on September 30, 2011; however, the THPO did not respond within the allotted 30 day comment period.

3.11.1 Cultural Resources Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact cultural resources.

Alternative B (Proposed Action)—One cultural resource site was identified during the Class III inventory within the APE. The proposed pipeline corridor was rerouted to avoid this site. As such, cultural resources impacts are not anticipated. If cultural resources are discovered during construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work shall not resume until written authorization to proceed has been received from the BIA. All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.

3.12 Socioeconomic Conditions

Socioeconomic conditions depend on the character, habits, and economic conditions of people living within the proposed project area. Business, employment, transportation, utilities, etc. are factors that affect the social climate of a community. Other factors that distinguish the social habits of one particular area from another include the geography, geology, and climate of the area.

The Fort Berthold Reservation is home to six major communities, consisting of New Town, White Shield, Mandaree, Four Bears, Twin Buttes, and Parshall. These communities provide small business amenities such as restaurants, grocery stores, and gas stations; however, they lack the larger shopping centers that are typically found in larger cities of the region such as Minot and Bismarck. According to 2000 US Census data, educational/health/social services is the largest industry on the Reservation, followed by the entertainment/recreation/ accommodation/food industry. The Four Bears Casino, Convenience Store, and Recreation Park are also major employers with over 320 employees, 90% of which are tribal members. In addition, several industries are located on the Reservation, including Northrop Manufacturing, Mandaree Enterprise Corporation, Three Affiliated Tribes Lumber Construction Manufacturing Corporation, and Uniband.

Several paved state highways provide access to the reservation including ND Highways 22 and 23 and US Highway 1804. These highways provide access to larger communities such as Bismarck, Minot and Williston. Paved and gravel BIA Route roadways serve as primary connector routes within the Reservation. In addition, networks of rural gravel roadways are located throughout Reservation boundaries providing access to residences, oil and gas developments, and agricultural land. Major commercial air service is provided out of Bismarck and Minot, with small-scale regional air service provided out of New Town and Williston.

3.12.1 Socioeconomic Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact the socioeconomic conditions in the project area. However, Alternative A would not allow for the collection of oil and gas resources from

the six wells operated by EOG, which could have positive effects on employment and income through the creation of jobs and payment of leases, easement, and/or royalties to Tribal members.

Alternative B (Proposed Action)—Alternative B is not anticipated to substantially impact the socioeconomic conditions in the project areas, but it does have the potential to yield beneficial impacts on Tribal employment and income. Qualified individual tribal members may find employment through oil and gas development and increase their individual incomes. Additionally, the proposed action may result in indirect economic benefits to tribal business owners resulting from construction workers expending money on food, lodging, and other necessities. The increased traffic during construction may create more congested traffic conditions for residents. Saddle Butte Pipeline would follow McKenzie County, BIA, and North Dakota Department of Transportation rules and regulations regarding oversize/overweight loads on state and county roads used as haul roads in order to maintain safe driving conditions.

3.13 Environmental Justice

Per Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, measures must be taken to avoid disproportionately high adverse impacts on minority or low-income communities.

Generally, the Three Affiliated Tribes qualify for environmental justice consideration as both a minority and low-income population. The population of North Dakota is predominantly Caucasian. Tribal members comprise 5.0% of North Dakota’s population and 22.2% of the population of McKenzie County.

According to 2005–2009 U.S. Census Bureau data, McKenzie county has a higher than statewide average per capita income while the Fort Berthold Reservation has a lower than state wide average per capita income. McKenzie County has a higher median household income than the statewide average, while the Fort Berthold Reservation has a lower median household income than the statewide average. In addition, McKenzie County has slightly higher rates of unemployment than the state average, while Fort Berthold’s rate of unemployment was substantially greater⁷. Please refer to *Table 6, Employment and Income*.

Table 6, Employment and Income

LOCATION	PER CAPITA INCOME	MEDIAN HOUSEHOLD INCOME	UNEMPLOYMENT RATE	INDIVIDUALS LIVING BELOW POVERTY LEVEL
McKenzie County	\$26,100	\$46,330	4.2%	12.3%
Fort Berthold Reservation	\$15,945	\$40,603	7.8%	25.2%
Statewide	\$24,978	\$45,140	2.4%	12.3%

⁷ While more current data reflecting income, unemployment, and poverty levels within the Fort Berthold Reservation are not available, it is anticipated that published 2010 Census data may show similar trends. However, assessment contained in this document uses the best available data at present time.

Source: U.S. Census Bureau, 2005-2009 American Community Survey

Population trends within McKenzie County and the Fort Berthold Reservation have shown an increase over the past decade. American Indians are the majority population on the Fort Berthold Reservation but are the minority population in McKenzie County and the state of North Dakota. Please refer to *Table 7, Demographic Trends*.

Table 7, Demographic Trends

LOCATION	POPULATION IN 2000	% OF STATE POPULATION	% CHANGE 2000–2009	PREDOMINANT RACE	PREDOMINANT MINORITY
McKenzie County	5,737	0.90%	+1.1%	White	American Indian (22.6%)
Fort Berthold Reservation	6,094	0.95%	+3.0%	American Indian ⁸	White (28.8%)
Statewide	639,725	--	-0.4%	White	American Indian (5.0%)

Source: U.S. Census Bureau, 2005-2009 American Community Survey.

3.13.1 Environmental Justice Impacts/Mitigation

Alternative A (No Action)—Alternative A would not result in disproportionately high adverse impacts to minority or low-income communities.

Alternative B (Proposed Action)—Alternative B would not require relocation of homes or businesses, cause community disruptions, or cause disproportionately adverse impacts to members of the Three Affiliated Tribes. The proposed project has not been found to pose significant impacts to any other critical element (public health and safety, water, wetlands, wildlife, soils, or vegetation) within the human environment. The proposed project is also not anticipated to result in disproportionately adverse impacts to non-Tribal minority or low-income populations.

Oil and gas development of the Bakken Formation is occurring both on and off the Fort Berthold Reservation. Employment opportunities related to oil and gas development may lower the unemployment rate and increase the income levels on the Fort Berthold Reservation. In addition, the Three Affiliated Tribes and allotted owners of mineral interests may receive income from oil and gas development on the Fort Berthold Reservation in the form of royalties. Infrastructure, such as the proposed pipelines, is an essential part of oil and gas development as it provides an effective means of transportation for moving recovered minerals to market. Without this infrastructure there would be an increase in traffic and greenhouse gas emissions resulting from the use of tanker trucks for all associated transportation of product.

⁸ According to the North Dakota Tourism Division, there are 10,400 enrolled members of the Three Affiliated Tribes.

3.14 Infrastructure and Utilities

The Fort Berthold Reservation's infrastructure consists of roads, bridges, utilities, and facilities for water, wastewater, and solid waste.

Known utilities and infrastructure within the vicinity of the proposed project includes paved and gravel roadways. The Fort Berthold Rural Water (FBRW) pipeline is located approximately 0.5 miles east of the proposed pipeline corridor adjacent to ND Highway 22.

3.14.1 Infrastructure and Utility Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact infrastructure or utilities.

Alternative B (Proposed Action)—The south pipeline corridor would cross an existing gravel roadway that is currently utilized exclusively for oil and gas related activities. This roadway would need to be temporarily closed to all traffic while pipeline installation is taking place. The roadway would be trenched during construction and promptly reclaimed following pipeline installation. Saddle Butte Pipeline would need to obtain permission from the roadway lease holder prior to construction. No other impacts to infrastructure or utilities are anticipated.

The proposed project would provide infrastructure for collection of oil, gas and water from multiple oil and gas wells on the Fort Berthold Reservation, which would provide a beneficial impact to infrastructure from decreased traffic and wear to roadways from hauling product from oil wells to collection sites.

3.15 Public Health and Safety

Health and safety are key concerns on any construction project. One major objective in designing and constructing a pipeline is to minimize the risk to public health and safety. Typically, the highest probability of an accident occurs during the construction phase due to the variety of equipment, number of personnel and types of activity which are present during this period.

Generally, negative impacts, such as noise, dust, air pollution from the use of fossil fuels, ground water contamination from liquid spills as well as traffic hazards from construction are temporary. These temporary negative impacts can be controlled through routine education, safety reminders/briefings, careful planning and proper preparation.

Combustion and explosive hazards, although an uncommon possibility in and around operating pipelines, are none the less an important consideration when evaluating public health and safety for any project. The risk and extent of negative impact from system operation is considerably more difficult to predict than the impact from construction due to the many, diverse variables involved.

The size of an area which can potentially be affected by a pipeline leak or rupture and possible resulting fire, or even an explosion, is specific to each particular site. In many instances it is impossible to find a route which does not have some possible negative impact during the life of a project. The ultimate goal is therefore to route, design and construct the pipelines in a manner which has the least probable impact on the environment and on society.

Factors which must be considered in establishing a pipeline corridor location and width include:

- Pipeline diameter, pipe material, and pressure rating

- Normal operating pressure of pipeline
- Product to be conveyed by the pipeline
- Depth to bury below the ground surface
- Type of soil
- Presence of vegetation (grass, trees, shrubs, barren etc.)
- Possibility of leak, fire, explosion, product discharge to surface or ground water etc.
- Topography (flat, rolling, badlands etc.) and minimum and maximum gradients of terrain
- Historical wind speed and direction
- Existing nearby structures, occupied and unoccupied
- Nearby roads and trails

3.15.1 Public Health and Safety Impacts/Mitigation

Alternative A (No Action)—Alternative A would not impact public health and safety.

Alternative B (Proposed Action)—The proposed oil/gas pipelines would have a maximum diameter of eight inches and the proposed water pipelines would have a maximum diameter of six inches. Each pipeline corridor would have a maximum of four pipelines associated with it. The pipelines for this project are proposed to be buried a minimum of 48-inches below the ground surface. Natural gas and crude oil are both highly flammable and can become explosive under certain conditions.

An explosion, although extremely unlikely, is possible; therefore, human safety and structural damage are potentially at risk. A gas pipeline rupture within the normal operating pressure could create a crater 50-100 feet in diameter depending on the depth of the buried pipeline, pipeline diameter, actual pipeline pressure, pipeline location, and soil conditions. If a fire resulted, temperatures could reach well in excess of several thousand degrees Fahrenheit at the point of rupture and decrease outward, depending upon wind speed and direction as well as ambient temperature and vegetative foliage in the area. This could cause structural damage in an area up to 2,500 feet downwind of the point of the blast.

Based upon the above information, the blast impact corridor width would be approximately one-mile (1/2-mile on each side of the proposed pipelines). Aerial view imagery shows that there are four residences within this blast corridor (two within the north line, two within the south line). This corridor also includes approximately 1.2 miles of Highway 22 as well as some additional unpaved roads which could be utilized at various times of the year. Please refer to *Figure 10, Blast Zone Perimeter Map*.

Third-party intrusions are one of the biggest contributing factors to spills. To aid in the prevention of such intrusions, Saddle Butte would fully comply with the marking requirements specified in the US Department of Transportation's rules and regulations, specifically contained in 49 CFR Parts 192 and 195. To ensure such compliance, Saddle Butte developed construction specifications to delineate the requirements for pipeline marking in accordance with applicable laws, rules, and regulations,

including the locations of such markings (e.g., road crossings, waterbody crossings, line of sight, etc.) and the manner of marking such pipelines (e.g., height of markings and signage on the markings).

Saddle Butte has committed to developing a spill response plan that would be submitted to the BIA prior to the commencement of the construction activities. The response plan would include procedures that specifically address making the appropriate contacts, isolating the incident, protecting waterways and providing contact information for all the appropriate contractors and experts necessary to facilitate a rapid response.



Figure 10, Blast Zone Perimeter Map

3.16 Cumulative Considerations

Cumulative impacts result from the incremental consequences of an action “when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions” (40 CFR 1508.7). Effects of an action may be minor when evaluated in an individual context, but these effects can add to other disturbances and collectively may lead to a measureable environmental change. By evaluating the impacts of the proposed action with the effects of other actions, the relative contribution of the proposed action to a projected cumulative impact can be estimated.

3.16.1 Past, Present, and Reasonable Foreseeable Actions

Oil and gas development in western North Dakota has occurred with varying intensity for the past 100 years. Gas development began in the area in 1909, and the first recorded oil well was drilled in 1920. North Dakota’s oil production has boomed twice prior to the current boom; first in the 1950’s, peaking in the 1960’s, and again in the 1970’s, peaking in the 1980’s. North Dakota is currently experiencing its third oil boom which has already far surpassed the previous booms in magnitude. This oil boom is occurring both within and outside the Fort Berthold Reservation.

According to the NDIC, as of July 18, 2011, there were approximately 568 active and/or confidential oil and gas wells within the Fort Berthold Reservation and 506 within the 20-mile radius outside the boundaries of the Fort Berthold Reservation. Please refer to *Figure 11, Existing and Proposed Oil and Gas Wells*. There are seven known oil and gas wells within one-mile of the proposed Mandaree pipelines. Please refer to *Table 8, Summary of Active and Proposed Wells*.

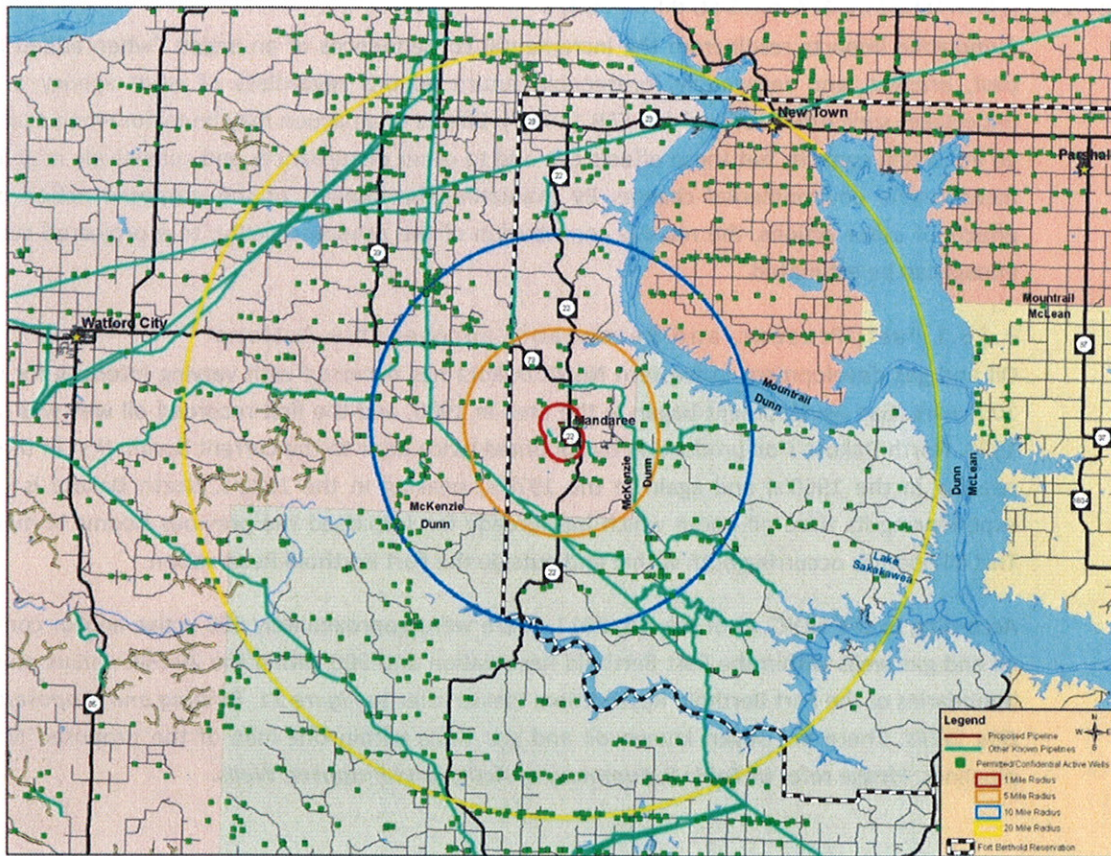


Figure 11, Existing and Proposed Oil and Gas Wells

Table 8, Summary of Active and Proposed Wells

DISTANCE FROM SITE	NUMBER OF ACTIVE OR PROPOSED WELLS
1 mile radius	7
5 mile radius	62
10 mile radius	251
20 mile radius	901

As mentioned previously in this EA, the Bakken Formation covers approximately 25,000 square miles beneath North Dakota, Montana, Saskatchewan, and Manitoba, with approximately two-thirds of the acreage beneath North Dakota. The Three Forks Formation lies beneath the Bakken. The North Dakota Department of Mineral Resources estimates that there are approximately 2 billion barrels of recoverable oil in each of these Formations and that there will be 30–40 remaining years of production, or more if technology improves.

3.16.2 Cumulative Impact Assessment

The proposed project is not anticipated to directly impact other oil and gas projects. It is a reasonable generalization that, while oil and gas development proposals and projects vary based on the developer, pipeline location, site constraints, and other factors, this proposed action is not unique

among others of its kind. It is also a reasonable generalization based on regulatory oversight by the BIA, NDIC, and other agencies as appropriate, that this proposed action is not unique in its attempts to avoid, minimize, or mitigate harm to the environment through the use of BMP's and site-specific environmental commitments. The following discussion addresses potential cumulative environmental impacts associated with the proposed project and other past, present, and reasonable foreseeable actions.

Land Use — As oil and gas exploration and production of the Bakken and Three Forks Formations proceed, lands atop these formations are converted from existing uses (often agricultural or vacant) to industrial, energy-producing uses. The proposed project would temporarily disturb grazed rangeland and pastureland while constructing the pipelines. The pipelines have been routed to avoid or minimize sensitive land uses and to maintain the minimum impact footprint possible. In addition, the BIA views these developments to be temporary in nature as impacted areas would be restored to original conditions upon completion of oil and gas activity.

Air Quality — The proposed project is anticipated to have a long-term benefit to air quality in the project area because it would reduce emissions associated with gas flaring. In addition, instead of trucks having to travel to these well sites to collect oil, gas and water the lateral pipelines would transport the product to main pipelines. The oil, gas and water would then be collected at one consolidated storage location. In the long-term, this may improve air quality in the area by reducing mobile source air pollutants associated with trucking operations.

Threatened and Endangered Species — The potential for cumulative impacts to threatened and endangered species comes to those listed species that may be affected by the proposed project or candidate species that may be impacted by the proposed project. The proposed project occurs within the central flyway through which whooping cranes migrate. Continual development (e.g. agriculture, oil and gas, wind, etc.) within the central flyway has compromised whooping crane habitat both through direct impacts via conversion of potential habitat for other uses and indirect impacts due to disrupting the use of potential stopover habitat, as whooping cranes prefer isolated areas and are known to avoid large-scale development. However, the proposed action, when added to other development directly and indirectly impacting whooping cranes and their habitat, is not anticipated to significantly contribute to cumulative impacts occurring to the whooping crane population.

As previously stated, habitat for the interior least tern, pallid sturgeon, and piping plover is primarily associated with Lake Sakakawea and its shoreline. When added to other past, present, and reasonable foreseeable projects, such as oil and gas wells and water intake structures on Lake Sakakawea, the proposed pipeline project may have an indirect cumulative impact on potential habitat (Lake Sakakawea and its shoreline) for these species due to potential leaks or spills. However, due to the buried nature of the project and distance from the shoreline, the transfer of accidentally released fluids to Lake Sakakawea and its associated habitats is unlikely. Therefore, it is unlikely the project would contribute to cumulative impacts to the interior least tern, pallid sturgeon, and piping plover.

Please refer to the discussion below (Wetlands, Eagles, Other Wildlife, and Vegetation) for an analysis of potential cumulative impacts to candidate species (Dakota Skipper and Sprague's pipit).

Wetlands, Eagles, Other Wildlife, and Vegetation — The proposed project, when added to previously constructed and reasonably foreseeable oil and gas wells and pipelines, would temporarily contribute

to habitat loss and fragmentation associated with construction of the pipelines. The North Dakota Parks and Recreation Department notes in its undated publication, "North Dakota Prairie: Our Natural Heritage" that approximately 80% of the state's native prairie has been lost to agriculture, with most of the remaining areas found in the arid west; ongoing oil and gas activity has the potential to threaten remaining native prairie resources.

The proposed action and other similar actions are carefully planned to avoid or minimize impacts to wildlife and associated habitat. Multiple components of the process used by the BIA to evaluate and approve such actions, including biological and botanical surveys, on-site assessments with representatives from multiple agencies and entities, agency comment periods on this EA, and the use of BMPs and site-specific environmental commitments are in place to ensure that environmental impacts associated with oil and gas development are minimized. The practice of utilizing existing roadways to the greatest extent practicable further minimizes impacts to wildlife habitats and prairie ecosystems. Reclamation activities are anticipated to minimize and mitigate disturbed habitat.

3.17 Irreversible and Irrecoverable Commitment of Resources

Potential irreversible and irretrievable commitments of resources include soil lost through wind and water erosion, cultural resources inadvertently destroyed, wildlife killed during earthmoving activities or in collisions with vehicles, and energy expended during construction and operation.

3.18 Short-term Use of the Environment versus Long-term Productivity

Short-term activities would not significantly detract from long-term productivity of the project area. The project area would generally remain available for livestock grazing, wildlife habitat and other uses. The Tribe and/or allottees with surface rights would be compensated for loss of productive acreage during construction. Successful and ongoing reclamation of the landscape would quickly support wildlife and livestock grazing, stabilize the soil, and reduce the potential for erosion and sedimentation. Long-term productivity of the oil and gas wells attached to the proposed pipelines would improve as previously lost hydrocarbons are collected and brought to market. In addition, there would be a long-term benefit as the proposed project would reduce air emissions associated with flaring and trucking of stored liquids at these well sites.

3.19 Permits

On Tribal land in North Dakota the EPA is responsible for permitting Storm Water Pollution Prevention Plans (SWPPP) through permit NDR1000I using the National Pollution Discharge Elimination System (NPDES). For NPDES permitting, both the construction and operation activities for oil and gas are subject to permitting if any of the three criteria are met:

- Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at any time since November 16, 1987;
- Has had a discharge of storm water resulting in the discharge or a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or
- Contributes to a violation of a water quality standard.

Construction of the proposed pipelines does not meet any of the three criteria; therefore, a SWPPP is not required for construction of the proposed project. Should one of these criteria be met during construction or operation of the pipelines, a SWPPP would need to be acquired through coordination with the EPA.

The proposed south pipeline corridor would cross a gravel roadway that is currently used exclusively for oil and gas related activities. Crossing this roadway would be accomplished via trenching, requiring the roadway to be temporarily closed off to all traffic. Saddle Butte Pipeline would need to obtain approval from the lease holder prior to any roadway groundwork.

3.20 Environmental Commitments/Mitigation

The following commitments have been made by Saddle Butte Pipeline:

- Topsoil would be segregated and stored on-site to be used in the reclamation process. All disturbed areas would be re-contoured to original elevations as part of the reclamation process.
- BMP's would be implemented to minimize wind and water erosion of soil resources.
- Water would be used as a palliative to control dust during construction if necessary and/or as directed by the BIA.
- Disturbed vegetation would be re-seeded with an approved seed mixture from the BIA Environmental Protection Specialist upon completion of the project. The seeding would be maintained until such time that the vegetation is consistent with surrounding undisturbed areas and the area is free of noxious weeds.
- If cultural resources are discovered during construction or operation, work shall immediately be stopped, the affected site secured, and BIA and THPO notified. In the event of a discovery, work shall not resume until written authorization to proceed has been received from the BIA.
- All project workers are prohibited from collecting artifacts or disturbing cultural resources in any area under any circumstances.
- If a bald or golden eagle or eagle nest is sighted within 0.5 miles of the project construction area, construction activities shall cease and the USFWS shall be notified for advice on how to proceed.
- Utility modifications would be identified during design and coordinated with the appropriate utility company.
- In the event that construction activity takes place within the nesting and breeding season, pre-construction surveys for migratory birds or their nests would be conducted within five days prior to that initiation of construction activities and/or the route would be mowed prior to the nesting/breeding season to prevent birds from nesting along the route.
- Measures implemented during construction to avoid the taking of migratory bird species would include: suitable mufflers on all internal combustion engines, certain compressor components to mitigate noise levels, and only utilizing approved roadways.
- All slopes greater than 15 percent would be hydroseeded or fiber matted to reduce the potential for soil erosion.

- During reclamation, slopes shall be roughened to reduce erosion.
- Straw wattles, silt fence, or water bars shall be installed on all slopes greater than 5 percent.
- Trees and shrubs with a trunk diameter greater than four inches would be chipped and spread as erosion control. Small shrubs would be buried, shredded, or left with backfill and re-spread during reclamation.
- Proper soil compaction and maintenance of the roadway crossing would be completed immediately following construction.
- For locations that are reclaimed in winter months or late fall such that no germination is possible, Saddle Butte will either use a sprayed reinforcement, lain matting reinforcement, spread and crimp straw and/or will minimize erosion issues with straw wattle and silt fence through winter months.

CHAPTER 4 PREPARERS AND AGENCY COORDINATION

4.1 Introduction

This chapter identifies the names and qualifications of the principal people contributing information to this EA. In accordance with Part 1502.6 of the Council on Environmental Quality regulations for implementing NEPA, the efforts of an interdisciplinary team comprising technicians and experts in various fields were required to accomplish this study.

This chapter also provides information about consultation and coordination efforts with agencies and interested parties, which has been ongoing throughout the development of this EA.

4.2 Preparers

Kadrmass, Lee & Jackson, Inc. prepared this EA under a contractual agreement between Saddle Butte Pipeline, LLC and Kadrmass, Lee & Jackson, Inc. A list of individuals with the primary responsibility for conducting this study, preparing the documentation, and providing technical reviews is contained in *Table 9, Preparers*.

Table 9, Preparers

AFFILIATION	NAME	TITLE	PROJECT ROLE
Bureau of Indian Affairs	Marilyn Bercier	Regional Environmental Scientist	Review of Draft EA and recommendation to Regional Director regarding FONSI or EIS
	Mark Herman	Environmental Engineer	
Saddle Butte Pipeline, LLC	Linda Selser	Vice President Land	Project development, alternatives, document review
	Christian Stoddard	Manager Land/GIS	Project development, alternatives, document review
Kadrmass, Lee & Jackson, Inc.	Grady Wolf	Environmental Scientist	Field resource surveys, client and agency coordination, senior review
	Mike Huffington	Environmental Planner	Impact assessment, field resource surveys, principal author
	Jennifer Macy	Archaeologist	Cultural resources surveys
	Kelly Morgan	Archaeologist	Cultural resources surveys
	Myron Kadrmass	Surveyor	Site Plats
	Jeff Price	GIS Analyst	Impact assessment, exhibit creation

4.3 Agency Coordination

To initiate early communication and coordination, an early notification package to tribal, federal, state, and local agencies and other interested parties was distributed on July 15, 2011. This scoping package included a brief description of the proposed project, as well as a location map. Pursuant to Section 102(2) (D) (IV) of NEPA, a solicitation of views was requested to ensure that social, economic, and environmental effects were considered in the development of this project.

At the conclusion of the 30-day comment period, eight responses were received. These comments provide valuable insight into the evaluation of potential environmental impacts. The comments were referenced and incorporated where appropriate within the environmental impact categories addressed in this document. *Please refer to Appendix A, Scoping Materials.*

4.4 Public Involvement

Provided the BIA approves this document and determines that no significant environmental impacts would result from the proposed action, a Finding of No Significant Impact (FONSI) will be issued. The FONSI is followed by a 30-day public appeal period. BIA will advertise the FONSI and public appeal period by posting notices in public locations throughout the Reservation. No construction activities may commence until the 30-day public appeal period has expired.

CHAPTER 5 REFERENCES

5.1 References

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APPENDIX A

Agency Scoping Materials

July 15, 2011

«CTitle» «First» «Last»
«Title»
«Department»
«Agency»
«Address»
«City», «State» «Zip»

**RE: Saddle Butte Pipeline, LLC.
Mandaree Cut Across 5-16 and 209
Fort Berthold Reservation
McKenzie County, North Dakota**

Dear «CTitle» «Last»,

On behalf of Saddle Butte Pipeline, LLC (Saddle Butte Pipeline), Kadmas, Lee & Jackson, Inc. (KL&J) is preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM for the construction of pipelines within two 100-foot right-of-way pipeline corridors on the Fort Berthold Reservation. Each pipeline corridor would include up to four pipelines (high pressure gas line, low pressure gas line, oil line, and water line) with each pipeline being up to 12-inches in diameter.

The south pipeline corridor located in T149N, R94W, Sections 9, would tie into an existing pipeline to the north on Tribal land and would continue south on fee property to a nearby well. The north pipeline corridor located in T149N, R94W, Sections 8 and 9 would tie into a pipeline on fee land. The total length of pipeline corridors located on tribal land would be 812 feet for the south corridor and 860 feet for the north corridor.

The proposed action would provide infrastructure to collect oil, gas and water from six wells located on three dual well pads operated by EOG, and transport it to existing pipelines operated by Saddle Butte Pipeline. ***Please refer to the enclosed project location map.*** Construction of the proposed pipelines is expected to begin in 2011.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We are interested in existing or proposed developments you may have that should be considered in connection with the proposed project. We also ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted.

Please provide your comments by **August 15, 2011**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

If you would like further information regarding this project, please contact me at (701) 355-8726. Thank you for your cooperation.

Sincerely,

Kadmas, Lee & Jackson, Inc.



Grady Wolf
Environmental Scientist
Enclosure (Project Location Map)

SOV MASTER LIST

Save as new file for each project and edit accordingly with project specific contacts

OTitle	First	Last	Title	Department	Agency	Address	City	State	Zip
Mr.	Weldon	Louderemik	Regional Director		Bureau of Indian Affairs	115 4th Ave. SE	Aberdeen	SD	57401
Mr.	Jeffrey	Desjardais	Environmental Protection Specialist		Bureau of Indian Affairs	202 Main Street	New Town	SD	58763
Mr.	Darryl	Turcotte	Environmental Protection Specialist		Bureau of Indian Affairs	202 Main Street	New Town	ND	58763
Mr.	Richard	Nelson	Chief, Resource Management		Bureau of Reclamation	PO Box 1017	Bismarck	ND	58502-1017
Mr.	Tom	Schafer	Manager		Federal Aviation Administration	2301 University Drive, Bldg 235	Bismarck	ND	58504
Mr.	Dan	Cimrosti	Manager		ND Regulatory Office	1513 S. 12th St.	Bismarck	ND	58504
Mr.	Charles	Sorensen	Natural Resource Specialist		US Army Corps of Engineers	PO Box 527	Riverdale	ND	58565
Ms.	Carndace	Gorton	Chief, Env., Economics, & Cultural Resource Section		US Army Corps of Engineers	106 S. 15th St.	Omaha	NE	68102-1618
Mr.	Gerald	Paulson	Director, Transmission Line Substations		US Department of Energy	PO Box 1173	Bismarck	ND	58502-1173
Mr.	Larry	Svoboda	Director		Western Area Power Admin.	1595 Wynkoop Street	Denver	CO	80202-1129
Mr.	Richard	Clark	Wellness Coordinator		US Environment Protection Agency	1595 Wynkoop Street	Denver	CO	80202-1129
Mr.	Jeffrey	Towner	Field Supervisor		US Fish & Wildlife Service	3425 Miriam Ave.	Bismarck	ND	58501
Mr.	Irwin	Russell	Acting State Conservationist		Natural Resources Conservation Service	PO Box 1458	Bismarck	ND	58502-1458
Mr.	Scott	Davis	Executive Director		Indian Affairs Commission	600 E. Blvd. Ave.	Bismarck	ND	58505-0300
Mr.	Greg	Weche	Director		US Geological Survey	1st Floor, Judicial Wing, Rm 117	Bismarck	ND	58501
Mr.	L. David	Glatf	Chief		ND Department of Health	821 E. Interstate Ave.	Bismarck	ND	58501-1947
Mr.	Terry	Steinwand	Director		ND Game & Fish Department	100 Bismarck Expressway	Bismarck	ND	58501-5095
Mr.	Ed	Murphy	State Geologist		ND Geological Survey	800 E. Blvd. Avenue	Bismarck	ND	58505-0840
Mr.	Mark	Zimmerman	Director		ND Parks & Recreation Dept.	1600 E. Century Ave., Suite 3	Bismarck	ND	58503-0549
Mr.	Dale	Fink	State Engineer		ND State Water Commission	900 E. Blvd. Ave.	Bismarck	ND	58505-0850
Mr.	Scott	Hochhalter	Soil Conservation Specialist		Soil Conservation Committee	2718 Gateway Ave., #104	Bismarck	ND	58503
Mr.	Bill	Boyd	Construction Manager		Midcontinent Cable Company	719 Memorial Hwy	Bismarck	ND	58503
Mr.	Doug	Dixon	General Manager		Montana Dakota Utilities	PO Box 1406	Williston	ND	58802-1406
Mr.	John	Sturucpey	General Manager		McKenzie Electric Cooperative	PO Box 649	Watford City	ND	58854-0849
Mr.	Ken	Miller	General Manager		Northern Border Pipeline Company	13710 FNB Parkway	Omaha	NE	68154-5200
Mr.	Ray	Christenson	Manager/CEO		Southwest Water Authority	4865 2nd St. W.	Dickinson	ND	58601
Mr.	David C.	Schellkopf	CEO		West Plains Electric Coop. Inc.	PO Box 1038	Dickinson	ND	58602-1038
Mr.	Elton	or Madam	Manager		Xcel Energy	PO Box 2747	Fargo	ND	58108-2747
Mr.	Lanny	Bagley	District Engineer		ND Department of Transportation	1700 3rd Ave W, Suite 101	Dickinson	ND	58601-3009
Mr.	Mike	Nash	Field Office Manager		Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ND	58601
Mr.	Michael	Savage	Assistant Field Office Manager		Bureau of Land Management	99 23rd Ave W, Suite A	Dickinson	ND	58601
Ms.	Myra	Pearson	Tribal Chairman		Sisseton-Wapeton Sioux Tribe	PO Box 509	Sisseton	SD	57262-0267
Mr.	Charles	Murphy	Tribal Chairman		Spirit Lake Sioux Tribe	PO Box 359	Ft. Totten	ND	58535
Mr.	Elton	Spotted Horse	Tribal Chairman		Standing Rock Sioux Tribe	PO Box D	Fort Yates	ND	58538
Mr.	Tex	Crows Breast	Environmental Division Director		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Iverle	St. Claire	Tribal Historic Preservation Officer		Three Affiliated Tribes	HC3 Box 2	New Town	ND	58763
Mr.	Dannon	Fox	Tribal Attorney		Turtle Mountain Chippewa	PO Box 300	Belcourt	ND	58316-0900
Ms.	V. Judy	Arnold	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Scott	Eagle	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Frank	Whitecall	Representative		Three Affiliated Tribes	PO Box 885	Mandaree	ND	58757
Mr.	Barry	Benson	Representative		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Fred	Poltra	Representative		Three Affiliated Tribes	PO Box 468	Parshall	ND	58770
Mr.	Lester	Crowheart	Director		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Mr.	Roger	Hovda	Operations Manager		Three Affiliated Tribes	70879 E Ave NW	New Town	ND	58636
Ms.	Linda	Shihovec	Auditor		Three Affiliated Tribes	404 Frontage Road	New Town	ND	58763
Ms.	Tim	Roger	Chirm		Three Affiliated Tribes	308 Four Bears Complex	New Town	ND	58763
					Reservation Telephone Cooperative	PO Box 68	Parshall	ND	58854
					McKenzie County	201 5th St NW	Watford City	ND	58834
					County Commission	581 Highway 85 S	Grassy Butte	ND	58634

APPENDIX B

Agency Scoping Responses



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
3425 Miriam Avenue
Bismarck, North Dakota 58501



AUG 26 2011

Mr. Grady Wolf, Environmental Planner
Kadrmas, Lee & Jackson
128 Soo Line Drive
PO Box 1157
Bismarck, North Dakota 58502-1157

Re: Saddle Butte Pipeline, LLC
Proposed Mandaree Cut Across 5-16
and 209, Fort Berthold Reservation,
McKenzie County, North Dakota

Dear Mr. Wolf:

This is in response to your July 15, 2011, scoping letter regarding two pipelines, each up to four proposed oil, gas and water lines to be completed by Saddle Butte Pipeline, LLC (Saddle Butte) on the Fort Berthold Reservation, McKenzie County, North Dakota. The North Corridor would be approximately 860-feet long, and the South Corridor would be approximately 812-feet long. Each would be located within a 100-foot right-of-way.

Specific locations for the proposed pipelines are:

North Corridor: T. 149 N., R. 94 W., SW $\frac{1}{4}$ Sec 4, NE $\frac{1}{4}$ Sec 8, NW $\frac{1}{4}$ Sec 9
South Corridor: T. 149 N., R. 94 W., SW $\frac{1}{4}$ Sec 9

We offer the following comments under the authority of and in accordance with the Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*) (MBTA), the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*) (NEPA), the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d, 54 Stat. 250) (BGEPA), Executive Order 13186 "Responsibilities of Federal Agencies to Protect Migratory Birds," the Endangered Species Act, as amended (16 U.S.C. 1531 *et seq.*) (ESA), and the National Wildlife Refuge System Improvement Act of 1997 (Public Law 105-57).

Threatened and Endangered Species

In an e-mail dated October 13, 2009, the Bureau of Indian Affairs (BIA) designated Kadrmas, Lee & Jackson (KLJ) to represent the BIA for informal Section 7 consultation under the ESA. Therefore, the U.S. Fish and Wildlife Service (Service) is responding to

you as the designated non-Federal representative for the purposes of ESA, and under our other authorities as the entity preparing the NEPA document for adoption by the BIA.

The Service concurs with your “may affect, not likely to adversely affect” determination for whooping cranes. This is predicated on Saddle Butte’s commitment to cease work if a whooping crane is sighted within 1 mile of the project area and immediately contact the Service. In coordination with the Service, work may resume after the bird(s) leave the area.

The Service acknowledges your determinations of “no effect” for pallid sturgeon, interior least terns and piping plovers. The project is approximately 4.2 miles from habitat for these species.

The Service acknowledges your “no effect” determination for gray wolf and black-footed ferret.

Our GIS data indicates that there may be suitable grassland habitat present along the proposed pipeline route for the Dakota skipper and Sprague’s pipit. No effects determinations are needed for candidate species. No legal requirement under the ESA exists to protect candidate species; however, it is within the spirit of the ESA to consider these species as having significant value and worth protecting. Section 7(a)(4) of the ESA provides a mechanism for identifying and resolving potential conflicts whereby a Federal action agency may request a conference on any proposed action that may adversely affect proposed species or proposed critical habitat at an early planning stage. During the conference, the Service may assist the action agency in determining effects and may advise the action agency on ways to avoid or minimize adverse effects to proposed species (or candidate species if present, and voluntarily considered by the action agency and/or the applicant) or proposed critical habitat. Conferences may involve informal discussions among the Service, the action agency, and the applicant.

Our recommendations to avoid or minimize impacts on candidate species would include reducing the construction ROW through native prairie to the greatest extent possible and committing to a comprehensive revegetation and monitoring protocol to ensure that the habitat along the pipeline ROW is returned to pre-project condition.

Our recommendations to avoid or minimize impacts on candidate species include reducing the construction ROW through native prairie to the greatest extent possible and committing to a comprehensive revegetation and monitoring protocol to ensure that the habitat along the pipeline ROW is returned to pre-project condition. We recommend that the revegetation plan include a commitment to reseed disturbed native prairie with a comparable native grass/forb seed mixture and planting a diverse mixture of native cool and warm season grasses and forbs. Research has suggested that a more diverse mix, including numerous forb species, is not only ecologically beneficial, but is also more weed resistant, allowing for less intensive management and chemical use. In essence, the more species included in a mixture, the higher the probability of providing competition to resist invasion by non-native plants. The seed source should be as local as possible,

preferably collected from the nearby native prairie. Obtain seed stock from nurseries within 250 miles of the project area to insure the particular cultivars are well adapted to the local climate. The Natural Resources Conservation Service (NRCS) compiles a list of vendors in North Dakota that supply conservation seed and plants (<http://www.plant-materials.nrcs.usda.gov/pubs/ndpmcmt8152.pdf>). Additional information on native grasses and forbs may be found at the NRCS Bismarck Plant Materials Center (<http://www.plant-materials.nrcs.usda.gov/ndpmc/>). Reseeded areas should be monitored to ensure that the area revegetates as expected.

Migratory Birds

The letter states that Saddle Butte will implement the following measures to avoid/minimize take of migratory birds:

- Construction will be completed outside of the migratory bird nesting season (Feb. 1-July 15);
- If construction needs to take place within the breeding and nesting season, pre-construction surveys for migratory birds and their nests will be conducted within 5 days prior to the initiation of construction activities. If birds or nests are discovered, the Service will be contacted for additional information on how to proceed;
- Or, mowing of the site prior to the nesting/breeding season would be completed to discourage nesting activity.

The above measures may reduce or eliminate impacts to migratory birds during construction. However, even if all measures are taken to avoid take of migratory birds during the construction phase, there is likely to be some migratory bird take associated with the ongoing operation and maintenance of the proposed pipeline. The Service recommends that Saddle Butte develop a Conservation Plan in cooperation with the Service to identify potential impacts to migratory birds during all phases of the proposed project. This Conservation Plan should evaluate impacts both from the immediate footprint of the project as well as from the larger impacts from ongoing disturbance. We recommend that this plan include a Habitat Equivalency Analysis or similar habitat analysis method, which may include funding to allow for conservation actions to be directed towards the greatest needs of migratory birds in the proposed pipeline project area.

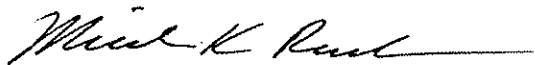
Bald and Golden Eagles

The letter states that a ground survey for eagle nests was conducted on June 28, 2011. No eagles or nests were discovered within 0.5-mile of the project area. The database does not indicate any recorded eagle nests within 0.5-mile of the project area. If a bald or golden eagle is sighted within 0.5-mile of the study area, construction activities will cease and the Service will be notified for advice on how to proceed.

The Service reminds Saddle Butte that commitment to implement the aforementioned measures does demonstrate compliance with the MBTA and the BGEPA.

Thank you for the opportunity to comment on this project proposal. If you require further information or the project plans change, please contact me or Heidi Riddle of my staff at (701) 250-4481 or at the letterhead address.

Sincerely,



for Jeffrey K. Towner
Field Supervisor
North Dakota Field Office

cc: Bureau of Indian Affairs, Aberdeen
(Attn: Marilyn Bercier)
Bureau of Land Management, Dickinson
ND Game & Fish Department, Bismarck



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS
Great Plains Regional Office
115 Fourth Avenue S.E., Suite 400
Aberdeen, South Dakota 57401



SEP 30 2011

IN REPLY REFER TO:
DESCRM
MC-208

Elgin Crows Breast, THPO
Mandan, Hidatsa and Arikara Nation
404 Frontage Road
New Town, North Dakota 58763

Dear Mr. Crows Breast:

We have considered the potential effects on cultural resources of three segments of gathering pipeline in McKenzie County, North Dakota. Approximately 21.1 acres were intensively inventoried using a pedestrian methodology. Potential surface disturbances are not expected to exceed the areas depicted in the enclosed report. No historic properties were located that appear to possess the quality of integrity and meet at least one of the criteria (36 CFR 60.4) for inclusion on the National Register of Historic Places. No properties were located which appear to qualify for protection under the American Indian Religious Freedom Act (42 USC 1996).

As the surface management agency, and as provided for in 36 CFR 800.5, we have therefore reached a determination of **no historic properties affected** for this undertaking. Catalogued as **BIA Case Number AAO-1926/FB/11**, the proposed undertaking, locations, and project dimensions are described in the following report:

Macy, Jennifer N.

(2011) Mandarec Natural Gas Gathering Line: A Class III Cultural Resource Inventory, McKenzie County, North Dakota. KLJ Cultural Resources for Saddle Butte Pipeline Company, Durango, CO.

If your office concurs with this determination, consultation will be completed under the National Historic Preservation Act and its implementing regulations. We will adhere to the Standard Conditions of Compliance.

If you have any questions, please contact Dr. Carson N. Murdy, Regional Archaeologist, at (605) 226-7656.

Sincerely,

ACTING Regional Director

Enclosure

cc: Chairman, Three Affiliated Tribes
Superintendent, Fort Berthold Agency



North Dakota State Water Commission

900 EAST BOULEVARD AVENUE, DEPT 770 • BISMARCK, NORTH DAKOTA 58505-0850
701-328-2750 • TDD 701-328-2750 • FAX 701-328-3696 • INTERNET: <http://swc.nd.gov>

August 17, 2011

Grady Wolf
Kadrmass, Lee and Jackson
PO Box 1157
Bismarck, ND 58502-1157

Dear Mr. Wolf:

This is in response to your request for review of environmental impacts associated with the Saddle Butte Pipeline, LLC, Mandaree Cut Across 5-16 and 209, Fort Berthold Reservation, McKenzie County, ND.

The proposed project has been reviewed by State Water Commission staff and the following comments are provided:

- The property is not located in an identified floodplain and it is believed the project will not affect an identified floodplain.
- It is the responsibility of the project sponsor to ensure that local, state and federal agencies are contacted for any required approvals, permits, and easements.
- All waste material associated with the project must be disposed of properly and not placed in identified floodway areas.
- No sole-source aquifers have been designated in ND.

There are no other concerns associated with this project that affect State Water Commission or State Engineer regulatory responsibilities.

Thank you for the opportunity to provide review comments. If you have any questions, please call me at 328-4969.

Sincerely,

Larry Knudson
Research Analyst

LJK:dp/1570



"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

August 9, 2011

Grady Wolf
Environmental Planner
Kadrmas, Lee & Jackson, Inc.
PO Box 1157
Bismarck, ND 58502-1157

Dear Mr. Wolf:

RE: Mandaree Cut Across 5-16 and 209
Badgun-Moccasin Creek Pipeline
Moccasin Creek Pipeline
Riverview Pipeline

Saddle Butte Pipeline, LLC is proposing the construction of five pipeline corridors, with up to four pipelines in each, on the Fort Berthold Reservation in Dunn and McKenzie Counties, North Dakota.

Our primary concern with these projects is the possible disturbance of native prairie and wooded draws associated with construction of the pipelines and access roads. We ask that work within these areas be avoided to the extent possible, every effort be made to prevent destruction of woody vegetation, and disturbed areas be reclaimed to pre-project conditions.

The National Wetland Inventory indicates various wetlands within the proposed project corridors. Steps should be taken to protect any wetlands that cannot be avoided, no alterations should be made to existing drainage patterns, and above-ground appurtenances should not be placed in wetland areas.

Sincerely,

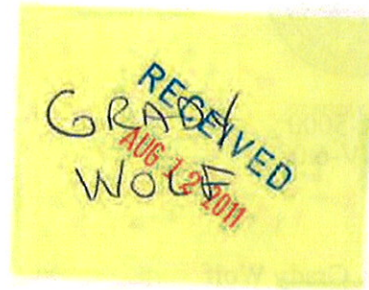
Greg Link
Chief
Conservation & Communication Division

js

Kadrmass
Lee &
Jackson
Engineers Surveyors
Planners

July 15, 2011

Mr. Tom Schauer
Manager
Bismarck Airports District Office
Federal Aviation Administration
2301 University Drive, Bldg 23B
Bismarck, ND 58504



**RE: Saddle Butte Pipeline, LLC.
Mandaree Cut Across 5-16 and 209
Fort Berthold Reservation
McKenzie County, North Dakota**

Dear Mr. Schauer,

On behalf of Saddle Butte Pipeline, LLC (Saddle Butte Pipeline), Kadrmass, Lee & Jackson, Inc. (KL&J) is preparing an EA (Environmental Assessment) under NEPA (the National Environmental Policy Act) for the BIA (Bureau of Indian Affairs) and BLM (Bureau of Land Management). The proposed action includes approval by the BIA and BLM for the construction of pipelines within two 100-foot right-of-way pipeline corridors on the Fort Berthold Reservation. Each pipeline corridor would include up to four pipelines (high pressure gas line, low pressure gas line, oil line, and water line) with each pipeline being up to 12-inches in diameter.

The south pipeline corridor located in T149N, R94W, Sections 9, would tie into an existing pipeline to the north on Tribal land and would continue south on fee property to a nearby well. The north pipeline corridor located in T149N, R94W, Sections 8 and 9 would tie into a pipeline on fee land. The total length of pipeline corridors located on tribal land would be 812 feet for the south corridor and 860 feet for the north corridor.

The proposed action would provide infrastructure to collect oil, gas and water from six wells located on three dual well pads operated by EOG, and transport it to existing pipelines operated by Saddle Butte Pipeline. **Please refer to the enclosed project location map.** Construction of the proposed pipelines is expected to begin in 2011.

To ensure that social, economic, and environmental effects are analyzed accurately, we solicit your views and comments on the proposed action. We are interested in existing or proposed developments you may have that should be considered in connection with the proposed project. We also ask your assistance in identifying any property or resources that you own, manage, oversee, or otherwise value that might be adversely impacted.

Please provide your comments by **August 15, 2011**. We request your comments by that date to ensure that we will have ample time to review them and incorporate them into the EA.

If you would like further information regarding this project, please contact me at (701) 355-8726. Thank you for your cooperation.

Sincerely,
Kadrmass, Lee & Jackson, Inc.

Grady Wolf
Environmental Scientist
Enclosure (Project Location Map)



U.S. Department
of Transportation
**Federal Aviation
Administration**

Date 7/20/11

No objection provided the Federal Aviation Administration is notified of construction or alterations as required by Federal Aviation Regulations, Part 77, Objects Affecting Navigable Airspace, Paragraph 77.9. Notice may be filed on-line at <https://oeaaa.faa.gov>.

Patricia L. Dressler, Environmental Protection Specialist
FAA/Bismarck Airports District Office
2301 University Drive, Building 23B
Bismarck, ND 58504

701 355 8400
128 Soo Line Drive
PO Box 1157
Bismarck, ND 58502-1157
Fax 701 355 8781
kljeng.com
Kadrmass, Lee & Jackson, Inc.



United States Department of the Interior

BUREAU OF RECLAMATION

Dakotas Area Office

P.O. Box 1017

Bismarck, North Dakota 58502



IN REPLY REFER TO:
DK-5000
ENV-6.00

JUL 25 2011

Mr. Grady Wolf
Environmental Scientist
Kadmas, Lee, & Jackson, Inc.
P.O. Box 1157
Bismarck, ND 58102-1175

Subject: Solicitation for an Environmental Assessment for the Construction of up to Four 12- Inch Pipelines of High and Low Pressure Gas, Oil, and Water Lines Within Two, 100 Feet Right-of-Ways by EOG on the Fort Berthold Reservation in McLean County, North Dakota.

Dear Mr. Wolf:

This letter is written to inform you that we received your July 18, 2011 letter, and the information and map have been reviewed by Bureau of Reclamation staff.

It appears there are no Federal Reclamation facilities in Sections 7 or 8, T. 149 N., R. 94 W., Mandaree. However, I have provided you with a map of the general vicinity of your proposed well pipeline routes to assist you in determination of potential effects due to your proposed action. Should you need to cross a Fort Berthold Rural Water System pipeline, please refer to the enclosed sheet for pipeline crossing specifications and contact our engineer Colin Nygaard, as below.

Since Reclamation is the lead Federal agency for the Fort Berthold Rural Water System, we request that any work planned on the reservation be coordinated with Mr. Lester Crows Heart, Fort Berthold Rural Water Director, Three Affiliated Tribes, 308 4 Bears Complex, New Town, North Dakota 58763.

For future reference, the Chief of Reclamation's Dakotas Area Office Environmental Management Division is Ms. Loretta Chandler. Please direct all future environmental consultation communications to Ms. Chandler.

Thank you for providing the information and opportunity to comment. If you have any further environmental questions, please contact me at 701-221-1287 or Colin Nygaard, Civil Engineer, for engineering questions at 701-221-1262.

Sincerely,

Kelly B. McPhillips
Environmental Specialist

Enclosures - 2

cc: See next page.

Subject: Solicitation for an Environmental Assessment for the Construction of up to
Four, 12 Inch Pipelines of High and Low Pressure Gas, Oil, and Water Lines
Within Two, 100 Feet Right-of-Ways by EOG on the Fort Berthold Reservation
in McLean County, North Dakota.

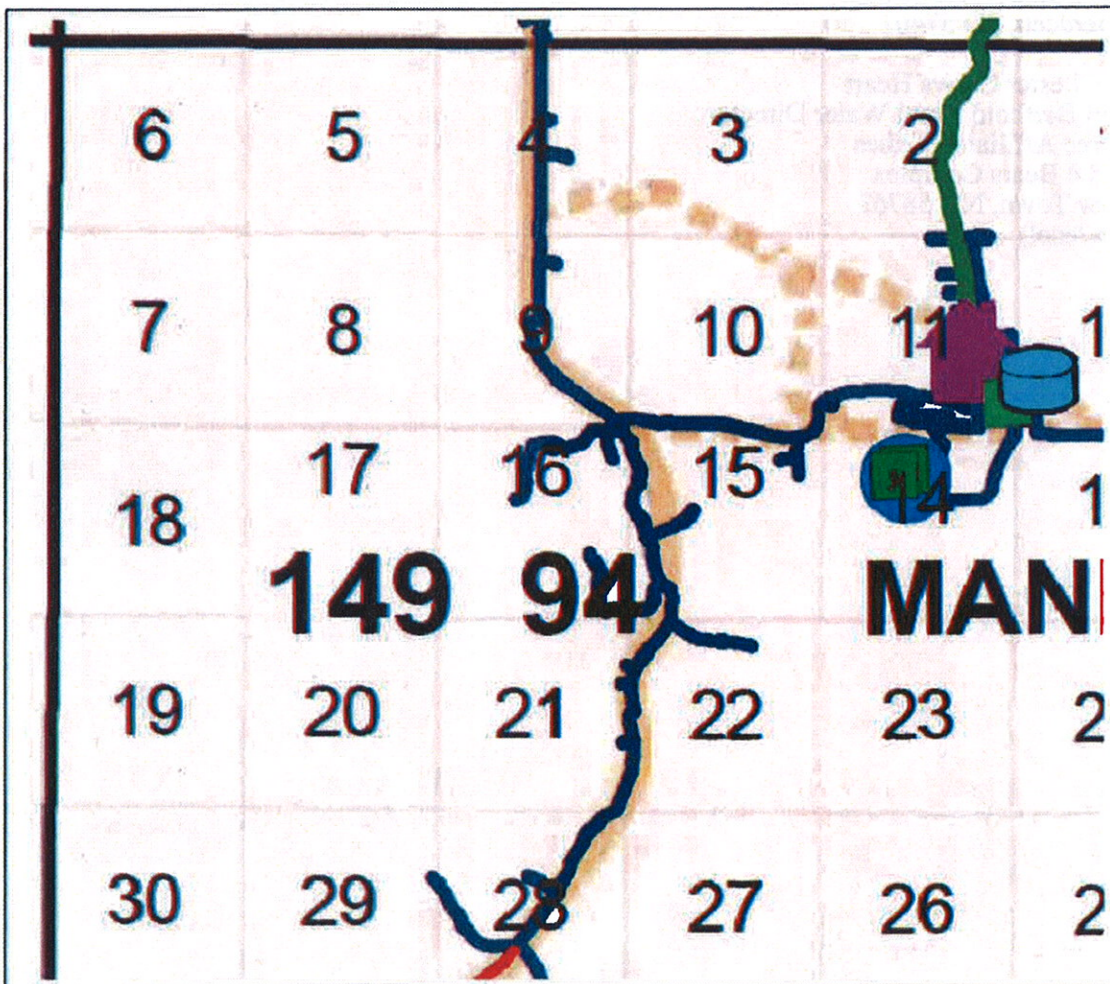
2

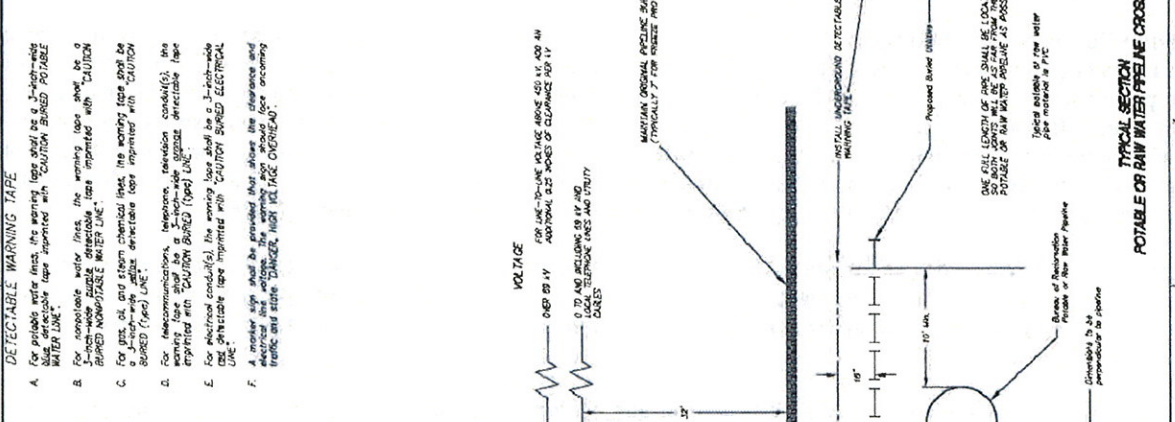
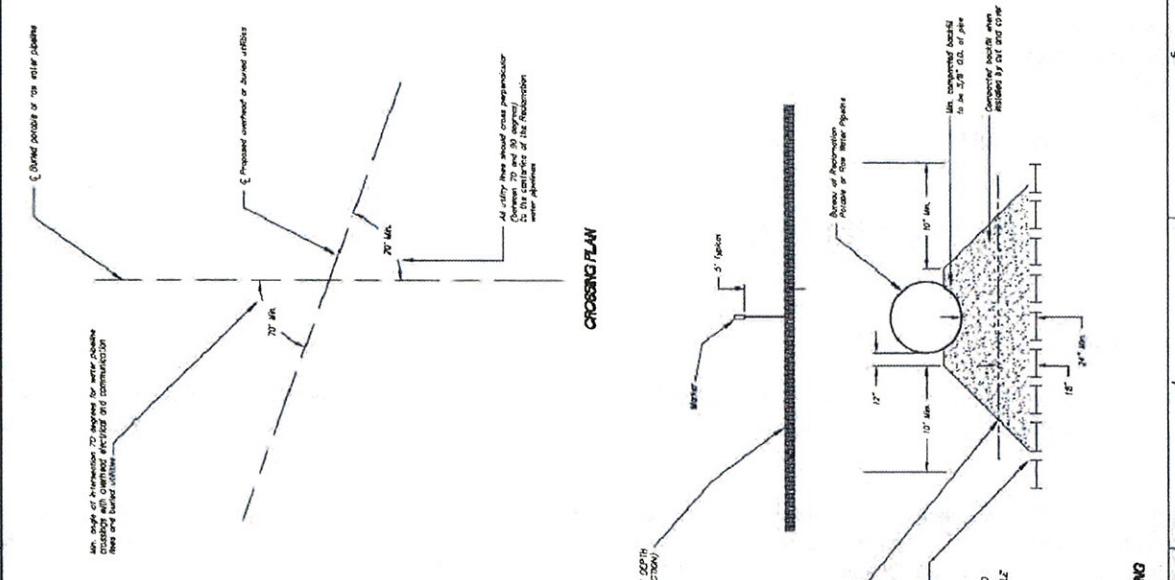
cc: Bureau of Indian Affairs
Great Plains Regional Office
Attention: Ms. Marilyn Bercier
Regional Environmental Scientist
115 Fourth Avenue S.E.
Aberdeen, SD 57401

Mr. Lester Crows Heart
Fort Berthold Rural Water Director
Three Affiliated Tribes
308 4 Bears Complex
New Town, ND 58763
(w/encl)

Subject: Solicitation for an Environmental Assessment for the Construction of up to Four, 12 Inch Pipelines of High and Low Pressure Gas, Oil, and Water Lines Within Two, 100 Feet Right of Ways by EOG on the Fort Berthold Reservation in McLean County, North Dakota.

Sections 7+8 in T149N, R94W, Mandaree, North Dakota, in McKenzie County - Dark blue lines represent rural water pipelines while solid and dashed brown lines represent county roads.





- ### NOTES
- Drawings are not to scale.
 - Clearance shown are minimum for all conditions.
 - Any additional permits required/needed for construction shall be provided by the Contractor.
 - Overhead conductor clearances shown are for 120 degrees F and load unladen sag.
 - Excavation activities, including re-vegetation, shall be implemented after completing construction activities.
 - The applicant shall submit a project description and detailed specifications along with a plan showing profiles and sections, and grading plans of proposed work within Reclamation's Right-of-Way (ROW).
 - The applicant shall submit procedures, re-vegetation plans, and schedules for crossing the Reclamation pipeline.
 - At the completion of construction activities the applicant shall submit AS-BUILT drawings that indicate the horizontal and vertical alignment of all utilities in areas disturbed during construction within Reclamation ROW.
 - Pipelines carrying hazardous materials or pollutants (e.g., oil, gasoline, natural gas, ammonia, etc.) shall be marked with a red stripe and shall be marked with a red stripe at the failure in the portion within Reclamation's ROW. The design shall require either:
S.1. Designing the crossing pipeline with an additional 50 percent working pressure factor. OR
S.2. Use secondary containment (pipe casing) for all hazardous material pipelines.
 - All work within 10 feet of the facility shall be done using hard-hat tool safety. The crossing shall be made at the center of the road, approximately 10' from the centerline.
 - The applicant and the Contractor shall be liable for all damages to Reclamation facilities and surroundings as a result of construction and for any other damages or losses suffered by Reclamation, including power, municipal and industrial water supply and communication lines.
 - For crossings of Reclamation facilities, Reclamation personnel bearing the liability will be the Center of Abandon, approximately 10' from the center of the road, etc.) to the applicant.
 - Typical Reclamation poles and raw water pipelines are PVC. If metallic pipelines or those containing metallic reinforcement (e.g., reinforced concrete) are encountered in the crossing a suitable bonded electronic facility and conductive protection may be required.

DETECTABLE WARNING TAPE
For potable water lines, the warning tape shall be a 3-inch-wide strip of yellow plastic with the word "CAUTION BURNED POTABLE WATER LINE" printed on it. For raw water lines, the warning tape shall be a 3-inch-wide strip of yellow plastic with the word "CAUTION BURNED RAW WATER LINE" printed on it. The warning tape shall be placed on the surface of the pipeline at least 24 inches in front of any excavation or other work that may disturb the pipeline. The warning tape shall be placed on the surface of the pipeline at least 24 inches in front of any excavation or other work that may disturb the pipeline.

OVERHEAD CROSSING
FOR 120-TO-125 LINE VOLTAGE ABOVE 450 V. AND 40' TO 45' CLEARANCE. SEE NOTES FOR ADDITIONAL CLEARANCE REQUIREMENTS FOR LOCAL TELEPHONE LINES AND UTILITY LINES.

UNDERGROUND CROSSINGS
The crossing shall be made at the center of the road, approximately 10' from the centerline. The crossing shall be made at the center of the road, approximately 10' from the centerline.



Jack Dalrymple, Governor
Mark A. Zimmerman, Director

1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649
Phone 701-328-5357
Fax 701-328-5363
E-mail parkrec@nd.gov
www.parkrec.nd.gov

July 25, 2011

Mr. Grady Wolf
Kadrmas Lee & Jackson
128 Soo Line Drive
PO Box 1157
Bismarck, ND 58502-1157

Re: Saddle Butte Pipeline, LLC, Madaree Cut Across 5-16 and 209

Dear Mr. Wolf,

The North Dakota Parks and Recreation Department (the Department) has reviewed the above referenced proposal to construct pipelines within 100-foot-right-of-way pipeline corridors on the Fort Berthold Reservation, McKenzie County, North Dakota.

Our agency scope of authority and expertise covers recreation and biological resources (in particular rare plants and ecological communities). The project as defined does not affect state park lands that we manage or Land and Water Conservation Fund recreation projects that we coordinate.

The North Dakota Natural Heritage biological conservation database has been reviewed to determine if any plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, there are no documented occurrences in our database within or adjacent to project area. Because this information is not based on a comprehensive inventory, there may be species of concern or otherwise significant ecological communities in the area that are not represented in the database. The lack of data for any project area cannot be construed to mean that no significant features are present. The absence of data may indicate that the project area has not been surveyed, rather than confirm that the area lacks natural heritage resources.

The Department recommends that the project be accomplished with minimal impacts and that all efforts be made to ensure that critical habitats not be disturbed in the project area to help secure rare species conservation in North Dakota. Regarding any reclamation efforts, we recommend that any impacted areas be revegetated with species native to the project area.

We appreciate your commitment to rare plant, animal and ecological community conservation, management and inter-agency cooperation to date. For additional information please contact Kathy Duttonhefner (701-328-5370 or kgduttonhefner@nd.gov) of our staff. Thank you for the opportunity to comment on this proposed project.

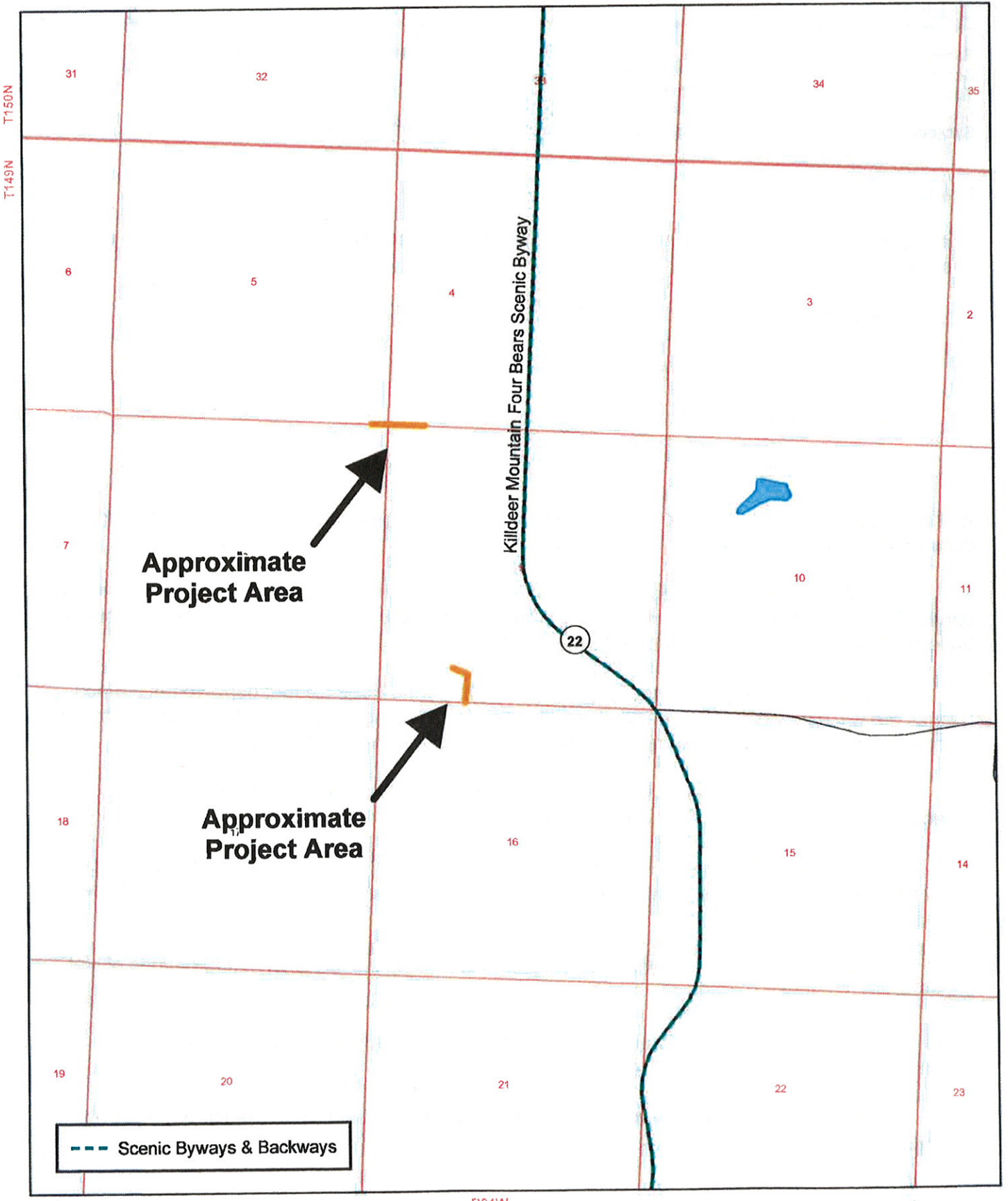
Sincerely,

Jesse Hanson, Coordinator
Planning and Natural Resources Division

R.USNDNH1*2011_165 KD7/20/2011DL8.15.2011

.....
Play in our backyard!

North Dakota Parks and Recreation Department North Dakota Natural Heritage Inventory



Grady Wolf

From: Sorensen, Charles G NWO [Charles.G.Sorensen@usace.army.mil]
Sent: Tuesday, July 26, 2011 10:34 AM
To: grady.wolf@kljeng.com
Cc: charles.g.sorensen@usace.army.mil
Subject: New Saddle Butte Pipelines within the Fort Berthold Reservation

Grady

Thank you for letting the U.S. Army Corps of Engineers Garrison Dam/Lake Sakakawea Project comment on the following actions

- Mandaree Cut Across 5-16 and 209
- Moccasin Creek Pipeline
- Badgun-Moccasin Creek
- Riverview Pipeline

At this time the COE would like to recommend that the following practices be implamented during the construction of the pipelines

- All lines shall be installed ten (10) feet from existing lines and will be buried at a minimum depth of four (4) feet below the surface. A line crossing a stream or creek shall be double cased and buried or bored a minimum of eight (8) feet below channel bed elevation
- Backfill shall be compacted in one (1) foot lifts from a three (3) foot depth to the surface. Excess dirt will be windrowed or bermed over the line for settlement. Care will be taken to eliminate all potential concentrations of water on the disturbed area or to block natural drainages.
- Non-ferrous pipe that is not encased must have an electrically conductive wire or other means of locating the pipe while it is underground
- No permanent above ground lines are allowed between the wellhead and treater, between the wellhead and tank battery, between the treater and flare pit, or anywhere vehicles would need to cross them.
- All line construction activities are subject to immediate suspension during periods of wet weather.
- During below-freezing weather, when the topsoil and subsoil are frozen solid, all construction activities should be suspended
- Construction of the pipeline should be accomplished using best management practices in regards to construction of the pipelines

Charles Sorensen
Natural Resource Specialist
U.S. Army Corps of Engineers
Garrison Dam/Lake Sakakawea Project

Riverdale, North Dakota Office
(701) 654 7411 ext 232



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
1513 SOUTH 12TH STREET
BISMARCK ND 58504-6640

July 19, 2011

North Dakota Regulatory Office

Kadrmass, Lee & Jackson, Inc.
Attn: Mr. Grady Wolf, Environmental Scientist
128 Soo Line Drive
PO Box 1157
Bismarck, North Dakota 58502-1157

Dear Mr. Wolf:

This is in response to your letter on behalf of Saddle Butte Pipeline, LLC; received July 18, 2011, requesting Department of the Army (DA), US Army Corps of Engineers (Corps) comments regarding construction of Mandaree Cut Across 5-16 and 209 pipelines within two 100-foot right-of-way pipeline corridors on the Fort Berthold Reservation, McKenzie County, North Dakota.

Corps regulatory offices administer Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. Section 10 of the Rivers and Harbors Act regulates work in, over or under navigable waters. The Missouri River (Lake Sakakawea) is considered navigable waters. Section 404 of the Clean Water Act regulates the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material include, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in the waters of the United States.

Nationwide Permit 12 authorizes activities for the construction of utility lines. A copy of this nationwide permit and conditions is enclosed. **The nationwide permit and conditions are submitted only for informational purposes and in no way is it, or this letter, to confirm that your activity complies with the nationwide permit and conditions.** As explained within Nationwide Permit 12, the permittee is required to submit a pre-construction notification to the Corps of Engineers prior to construction if any of seven criteria are met.

If your proposal requires review by the Corps in accordance with Section 10 of the Rivers and Harbors Act and possibly Section 404 of the Clean Water Act, complete and submit the enclosed Corps of Engineers permit application to the U. S. Army Corps of Engineers, North Dakota Regulatory Office, 1513 South 12th Street, Bismarck, North Dakota 58504.

If we can be of further assistance or should you have any questions regarding our program, please do not hesitate to contact this office by letter or phone at (701) 255-0015.

Sincerely,

A handwritten signature in black ink that reads "Daniel E. Cimarosti". The signature is written in a cursive style with a large initial "D" and a small "E".

Daniel E. Cimarosti
Regulatory Program Manager
North Dakota

Enclosures

ENG Form 4345
Fact Sheet NWP 12

**Instructions for Preparing a
Department of the Army Permit Application**

Blocks 1 through 4. To be completed by Corps of Engineers.

Block 5. Applicant's Name. Enter the name and the E-mail address of the responsible party or parties. If the responsible party is an agency, company, corporation, or other organization, indicate the name of the organization and responsible officer and title. If more than one party is associated with the application, please attach a sheet with the necessary information marked Block 5.

Block 6. Address of Applicant. Please provide the full address of the party or parties responsible for the application. If more space is needed, attach an extra sheet of paper marked Block 6.

Block 7. Applicant Telephone Number(s). Please provide the number where you can usually be reached during normal business hours.

Blocks 8 through 11. To be completed, if you choose to have an agent.

Block 8. Authorized Agent's Name and Title. Indicate name of individual or agency, designated by you, to represent you in this process. An agent can be an attorney, builder, contractor, engineer, or any other person or organization. Note: An agent is not required.

Blocks 9 and 10. Agent's Address and Telephone Number. Please provide the complete mailing address of the agent, along with the telephone number where he / she can be reached during normal business hours.

Block 11. Statement of Authorization. To be completed by applicant, if an agent is to be employed.

Block 12. Proposed Project Name or Title. Please provide name identifying the proposed project, e.g., Landmark Plaza, Burned Hills Subdivision, or Edsall Commercial Center.

Block 13. Name of Waterbody. Please provide the name of any stream, lake, marsh, or other waterway to be directly impacted by the activity. If it is a minor (no name) stream, identify the waterbody the minor stream enters.

Block 14. Proposed Project Street Address. If the proposed project is located at a site having a street address (not a box number), please enter it here.

Block 15. Location of Proposed Project. Enter the latitude and longitude of where the proposed project is located. If more space is required, please attach a sheet with the necessary information marked Block 15.

Block 16. Other Location Descriptions. If available, provide the Tax Parcel Identification number of the site, Section, Township, and Range of the site (if known), and / or local Municipality that the site is located in.

Block 17. Directions to the Site. Provide directions to the site from a known location or landmark. Include highway and street numbers as well as names. Also provide distances from known locations and any other information that would assist in locating the site. You may also provide description of the proposed project location, such as lot numbers, tract numbers, or you may choose to locate the proposed project site from a known point (such as the right descending bank of Smith Creek, one mile downstream from the Highway 14 bridge). If a large river or stream, include the river mile of the proposed project site if known.

Block 18. Nature of Activity. Describe the overall activity or project. Give appropriate dimensions of structures such as wing walls, dikes (identify the materials to be used in construction, as well as the methods by which the work is to be done), or excavations (length, width, and height). Indicate whether discharge of dredged or fill material is involved. Also, identify any structure to be constructed on a fill, piles, or float-supported platforms.

The written descriptions and illustrations are an important part of the application. Please describe, in detail, what you wish to do. If more space is needed, attach an extra sheet of paper marked Block 18.

Block 19. Proposed Project Purpose. Describe the purpose and need for the proposed project. What will it be used for and why? Also include a brief description of any related activities to be developed as the result of the proposed project. Give the approximate dates you plan to both begin and complete all work.

Block 20. Reasons for Discharge. If the activity involves the discharge of dredged and/or fill material into a wetland or other waterbody, including the temporary placement of material, explain the specific purpose of the placement of the material (such as erosion control).

Block 21. Types of Material Being Discharged and the Amount of Each Type in Cubic Yards. Describe the material to be discharged and amount of each material to be discharged within Corps jurisdiction. Please be sure this description will agree with your illustrations. Discharge material includes: rock, sand, clay, concrete, etc.

Block 22. Surface Areas of Wetlands or Other Waters Filled. Describe the area to be filled at each location. Specifically identify the surface areas, or part thereof, to be filled. Also include the means by which the discharge is to be done (backhoe, dragline, etc.). If dredged material is to be discharged on an upland site, identify the site and the steps to be taken (if necessary) to prevent runoff from the dredged material back into a waterbody. If more space is needed, attach an extra sheet of paper marked Block 22.

Block 23. Description of Avoidance, Minimization, and Compensation. Provide a brief explanation describing how impacts to waters of the United States are being avoided and minimized on the project site. Also provide a brief description of how impacts to waters of the United States will be compensated for, or a brief statement explaining why compensatory mitigation should not be required for those impacts.

Block 24. Is Any Portion of the Work Already Complete? Provide any background on any part of the proposed project already completed. Describe the area already developed, structures completed, any dredged or fill material already discharged, the type of material, volume in cubic yards, acres filled, if a wetland or other waterbody (in acres or square feet). If the work was done under an existing Corps permit, identify the authorization, if possible.

Block 25. Names and Addresses of Adjoining Property Owners, Lessees, etc., Whose Property Adjoins the Project Site. List complete names and full mailing addresses of the adjacent property owners (public and private) lessees, etc., whose property adjoins the waterbody or aquatic site where the work is being proposed so that they may be notified of the proposed activity (usually by public notice). If more space is needed, attach an extra sheet of paper marked Block 24.

Information regarding adjacent landowners is usually available through the office of the tax assessor in the county or counties where the project is to be developed.

Block 26. Information about Approvals or Denials by Other Agencies. You may need the approval of other federal, state, or local agencies for your project. Identify any applications you have submitted and the status, if any (approved or denied) of each application. You need not have obtained all other permits before applying for a Corps permit.

Block 27. Signature of Applicant or Agent. The application must be signed by the owner or other authorized party (agent). This signature shall be an affirmation that the party applying for the permit possesses the requisite property rights to undertake the activity applied for (including compliance with special conditions, mitigation, etc.).

DRAWINGS AND ILLUSTRATIONS

General Information.

Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are identified as a Vicinity Map, a Plan View or a Typical Cross-Section Map. Identify each illustration with a figure or attachment number.

Please submit one original, or good quality copy, of all drawings on 8½ x11 inch plain white paper (electronic media may be substituted). Use the fewest number of sheets necessary for your drawings or illustrations.

Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view, or cross-section). **While illustrations need not be professional (many small, private project illustrations are prepared by hand), they should be clear, accurate, and contain all necessary information.**

18. Nature of Activity (Description of project, include all features)

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards
-------------------------------	-------------------------------	-------------------------------

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres
Or
Liner Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? Yes No IF YES, DESCRIBE THE COMPLETED WORK

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

Address --
City -- State -- Zip --

26. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
--------	----------------	-----------------------	--------------	---------------	-------------

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT

DATE

SIGNATURE OF AGENT

DATE

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**FACT SHEET
NATIONWIDE PERMIT 12
(2007)**

UTILITY LINE ACTIVITIES. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or

under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters), copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

General Conditions: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP's 4 and 48.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

13. **Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.

15. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

16. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical

habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWP's only after it is determined that the impacts to the critical resource waters will be no more than minimal.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWP's. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWP's.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address

documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality. *Specifically in North Dakota, the North Dakota Department of Health has denied certification for projects under this Nationwide Permit proposed to cross all classified rivers, tributaries and lakes; individual certification for project in these waterways must be obtained by the project proponent prior to authorization under this Nationwide Permit. For utility line crossings of all other waters, the Department of Health has issued water quality certification provided the attached Construction and Environmental Disturbance Requirements are followed.*

22. Coastal Zone Management. *Not Applicable.*

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:
"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

26. Compliance Certification. Each permittee who received a NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. See attached pages.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project.

General Condition 27. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

**2007 NATIONWIDE PERMITS
REGIONAL CONDITIONS
STATE OF NORTH DAKOTA
OMAHA DISTRICT – CORPS OF ENGINEERS**

The U.S. Army Corps of Engineers has adopted the following regional conditions for activities authorized by nationwide permits within the State of North Dakota. However, the pre-construction notification requirements defined below are not applicable to Nationwide Permit 47.

1. Wetlands Classified as Fens

All Nationwide Permits, with the exception of 3, 5, 20, 32, 38, 45, and 47, are revoked for use in fens in North Dakota. For nationwide permits 3, 5, 20, 32, 38, and 45 permittees must notify the Corps in accordance with General Condition 27 (Notification) prior to initiating any regulated activity impacting fens in North Dakota.

Fens are wetlands that develop where a relatively constant supply of ground water to the plant rooting zone maintains saturated conditions most of the time. The water chemistry of fens reflects the mineralogy of the surrounding and underlying soils and geological materials. The substrate is carbon-accumulating, ranging from muck to peat to carbonates. These wetlands may be acidic to alkaline, have pH ranging from 3.5 to 8.4 and support a range of vegetation types. Fens may occur on slopes, in depressions, or on flats (i.e., in different hydrogeomorphic classes; after: Brinson 1993).

2. Waters Adjacent to Natural Springs

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) for regulated activities located within 100 feet of the water source in natural spring areas in North Dakota. For purposes of this condition, a spring source is defined as any location where there is artesian flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

3. Missouri River, including Lake Sakakawea and Lake Oahe within the State of North Dakota

For all Nationwide Permits permittees must notify the Corps in accordance with General Condition No. 27 (Notification) prior to initiating any regulated activity in the Missouri River, including Lake Sakakawea and Lake Oahe, within the State of North Dakota.

4. Historic Properties

That the permittee and/or the permittee's contractor, or any of the employees, subcontractors or other persons working in the performance of a contract(s) to complete the work authorized herein, shall cease work and report the discovery of any previously unknown historic or archeological remains to the North Dakota Regulatory Office. Notification shall be by telephone or fax within 24 hours of the discovery and in writing within 48 hours. Work shall not resume until the permittee is notified by the North Dakota Regulatory Office.

5. Spawning Condition

That no regulated activity within waters of the United States listed as Class III or higher on the 1978 Stream Evaluation Map for the State of North Dakota or on the North Dakota Game and Fish Department's website as a North Dakota Public Fishing Water shall occur between 15 April and 1 June. No regulated activity within the Red River of the North shall occur between 15 April and 1 July

Additional Information

Permittees are reminded that General Condition No. 6 prohibits the use of unsuitable material. In addition, organic debris, some building waste, and materials excessive in fines are not suitable material.

Specific verbiage on prohibited materials and the 1978 Stream Evaluation Map for the State of North Dakota can be accessed on the North Dakota Regulatory Office's website at:
<https://www.nwo.usace.army.mil/html/od-nd/ndhome.htm>



Construction and Environmental Disturbance Requirements

These represent the minimum requirements of the North Dakota Department of Health. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect the waters of the State of North Dakota. All projects will be designed and implemented to restrict the losses or disturbances of soil, vegetative cover and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion of exposed soil surfaces and trapping sediments being transported. Examples include, but are not restricted to, sediment dams or berms, diversion dikes, hay bales as erosion checks, riprap, mesh or burlap blankets to hold soil during construction, and immediately establishing vegetative cover on disturbed areas after construction is completed. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, or land resources will be protected against compaction, vegetation loss, and unnecessary damage.

Surface Waters

All construction which directly or indirectly impacts aquatic systems will be managed to minimize impacts. All attempts will be made to prevent the contamination of water at construction sites from fuel spillage, lubricants, and chemicals, by following safe storage and handling procedures. Stream bank and stream bed disturbances will be controlled to minimize and/or prevent silt movement, nutrient upsurges, plant dislocation, and any physical, chemical, or biological disruption. The use of pesticides or herbicides in or near these systems is forbidden without approval from this Department.

Fill Material

Any fill material placed below the high water mark must be free of top soils, decomposable materials, and persistent synthetic organic compounds (in toxic concentrations). This includes, but is not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill materials. All temporary fills must be removed. Debris and solid wastes will be removed from the site and the impacted areas restored as nearly as possible to the original condition.



NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



July 20, 2011

Mr. Grady Wolf
Environmental Scientist
Kadmas, Lee & Jackson, Inc.
P.O. Box 1157
Bismarck, ND 58502-1157

RECEIVED
JUL 21 2011

Re: Saddle Butte Pipeline, LLC, Mandaree Cut Across 5-16 and 209
Fort Berthold Reservation, McKenzie County

Dear Mr. Wolf:

This department has reviewed the information concerning the above-referenced project submitted under date of July 15, 2011 with respect to possible environmental impacts.

This department believes that environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods. With respect to construction, we have the following comments:

1. All necessary measures must be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise are to be dealt with in an efficient and effective manner.
2. Noise from construction activities may have adverse effects on persons who live near the construction area. Noise levels can be minimized by ensuring that construction equipment is equipped with a recommended muffler in good working order. Noise effects can also be minimized by ensuring that construction activities are not conducted during early morning or late evening hours.

The department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

L. David Glatt, P.E., Chief
Environmental Health Section

LDG:cc

Environmental Health
Section Chief's Office
701.328.5150

Division of
Air Quality
701.328.5188

Division of
Municipal Facilities
701.328.5211

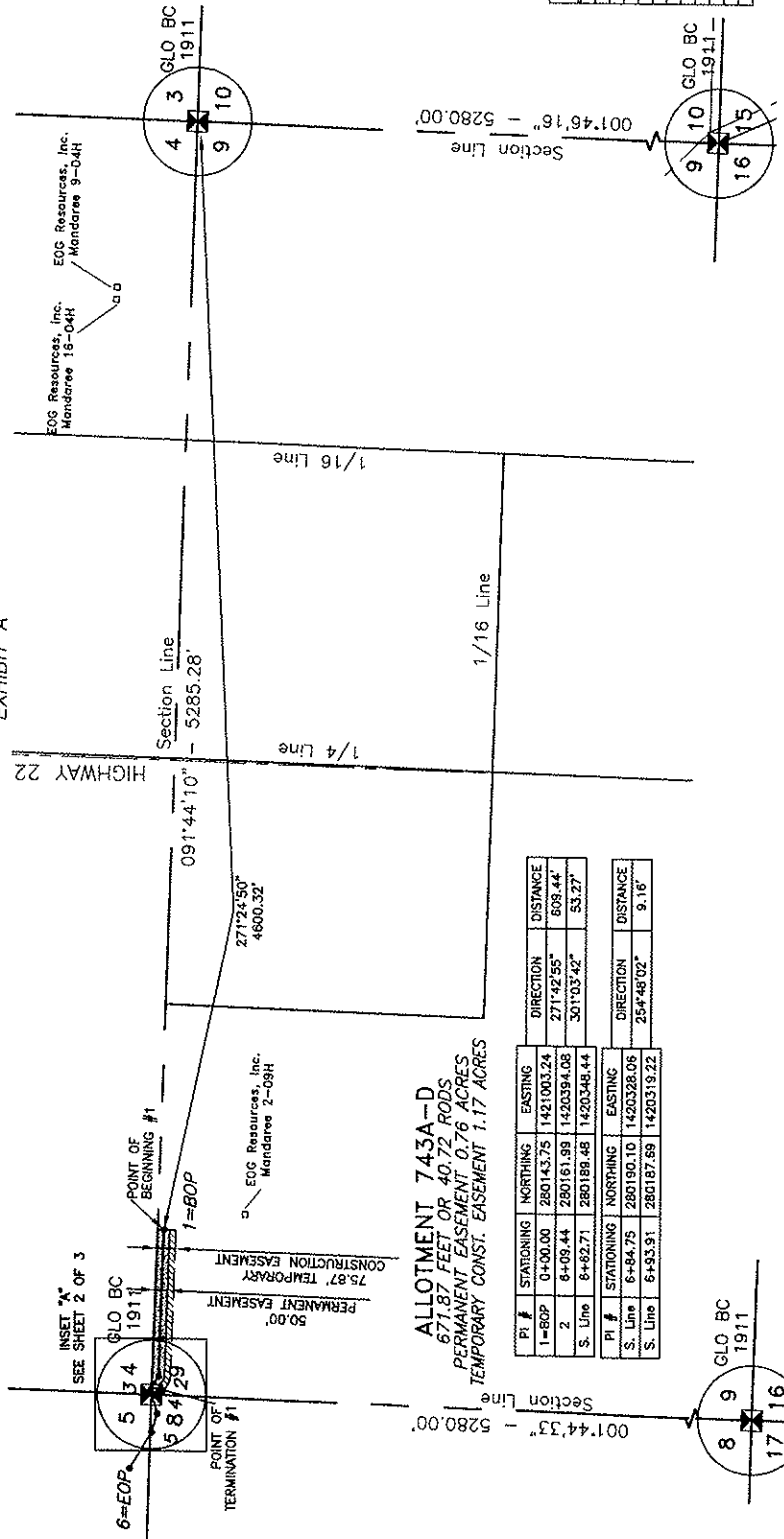
Division of
Waste Management
701.328.5166

Division of
Water Quality
701.328.5210

APPENDIX C

Pipeline Plats

ALLOTMENT 743A-D
 NW1/4NW1/4 OF SECTION 9, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"



ALLOTMENT 743A-D
 671.87 FEET OR 40.72 RODS
 PERMANENT EASEMENT 0.76 ACRES
 TEMPORARY CONST. EASEMENT 1.17 ACRES

PT. #	STATIONING	NORTHING	EASTING	DIRECTION	DISTANCE
1=BOP	0+00.00	280143.75	1421003.24	271°42'55"	609.44'
2	8+09.44	280161.99	1420394.08	301°03'42"	53.27'
S. Line	8+62.71	280189.48	1420348.44		
PT. #	STATIONING	NORTHING	EASTING	DIRECTION	DISTANCE
S. Line	8+84.75	280190.10	1420328.06	254°48'02"	9.16'
S. Line	6+93.91	280187.69	1420319.22		

NOTE: Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.

FIELD BOOK: OP-244 PG. 33-37



LEGEND

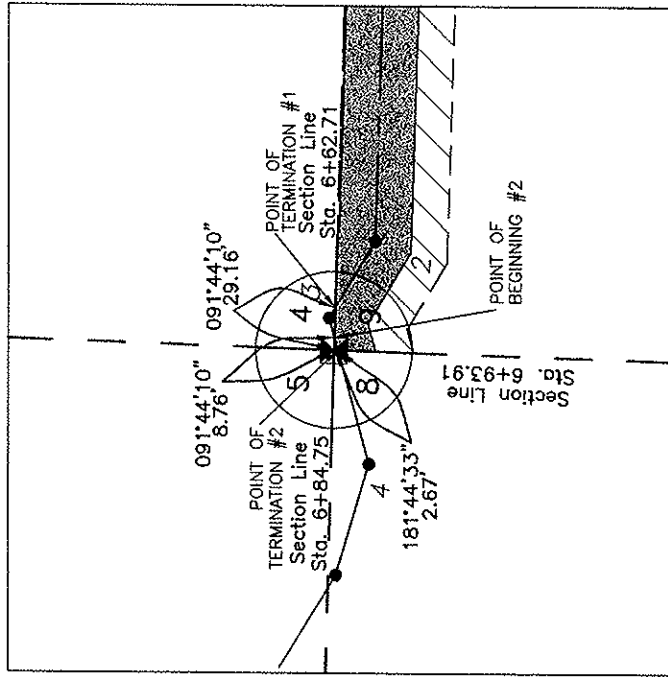
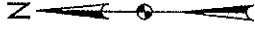
SYMBOL	ITEM
[Symbol]	GRADED ROAD SHOULDER
[Symbol]	CATTLE GUARD
[Symbol]	TREE TRIMS, BARKS
[Symbol]	DRAINAGE LINE
[Symbol]	CONCRETE
[Symbol]	IMBEDDED WIRE FENCE
[Symbol]	WELDED IRON
[Symbol]	CONCRETE
[Symbol]	POWER POLE STREET LIGHT
[Symbol]	UTILITY MARKER OR SIGN
[Symbol]	TELEPHONE POST/STAKE
[Symbol]	WELL LOCATION

SHEET 1 OF 3
 DWG NO. MandareeNorth_Ease
 JOB NO. 3710481
 SCALE: 1:600
 PARCEL NUMBER 9-149-94-A
 LAYOUT: 9-149-94-A (1)

SADDLE BUTTE MANDAREE NORTH LATERAL
 MCKENZIE COUNTY, NORTH DAKOTA
 EASEMENTS ON AND ACROSS THE
 NW1/4NW1/4 OF SEC. 9, T. 149N., R. 94W.

Kadmas Lee & Jackson
 Registered Surveyors
 858 Main Avenue, Suite 301
 Bismarck, ND 58101
 © Kadmas Lee & Jackson 2011
 DRAWN BY: T. T. T. DATE: 10/4/2011
 CHECKED BY: DATE: -

ALLOTMENT 743A-D
 NW1/4NW1/4 OF SECTION 9, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"

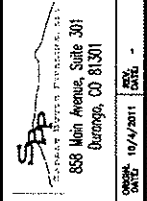


LEGEND

SYMBOL	ITEM
[Symbol]	BARBED WIRE FENCE
[Symbol]	CONCRETE CURB
[Symbol]	CONCRETE DRIVE
[Symbol]	TREE MARK
[Symbol]	WOOD SIGN
[Symbol]	CONCRETE MARKERS
[Symbol]	CONCRETE LINE
[Symbol]	CONCRETE
[Symbol]	BARBED WIRE FENCE
[Symbol]	WALDOPE FENCE
[Symbol]	OVERHEAD POWER LINE
[Symbol]	POWER POLE/STREET LIGHT
[Symbol]	UTILITY MARKER OR SIGN
[Symbol]	TELEPHONE PERSONAL
[Symbol]	WELL CASING

SHEET 2 OF 3
 DWG NO. MandareeNorth_Ease
 JOB NO. 3710461
 SCALE: 1:100
 PROJECT NUMBER 9-149-94-A

SADDLE BUTTE MANDAREE NORTH LATERAL
 MCKENZIE COUNTY, NORTH DAKOTA
 EASEMENTS ON AND ACROSS THE
 NW1/4NW1/4 OF SEC. 9, T. 149N., R. 94W.



Kadmas Lee & Jackson
 Registered Surveyors
 © Kadmas, Lee & Jackson 2011
 DALLAS, TX; J. J. JAKE
 DATE: 10/4/2011
 REV: -

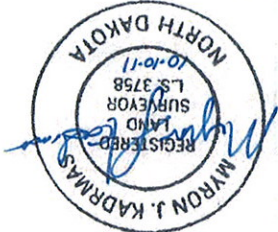


FIELD BOOK: OP-244 PG. 33-37

NOTE:
 Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.

DWG NO. MandareeNorth_Ease JOB NO. 3710461 SCALE: NONE PROJECT NUMBER 9-149-94-A		EASEMENTS ON AND ACROSS THE MCKENZIE COUNTY, NORTH DAKOTA SADDLE BUTTE MANDAREE NORTH LATERAL	858 Main Avenue, Suite 301 Durgoo, CO 81301 SADDLE BUTTE PIPELINE COMPANY ENGINEERS & SURVEYORS, LLC	10/9/2011 DATE 10-10-11	DWG. NO. 9-149-94-A LAYOUT: 9-149-94-A (3)
---	--	---	---	-------------------------------	---

FIELD BOOK: OP-244 PG. 33-37
 SHEET 3 OF 3



Date 10-10-11
 Myron J. Kadrmas, Registered Land Surveyor
 N.D. RLS No. 3758

NOTES:
 1. Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot, Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.
 2. Descriptions and sketches of easements depicted herein are based on information obtained while conducting the survey for easement acquisition and on deeds supplied by the client, and DO NOT CONSTITUTE THE RESULTS OF A FULL BOUNDARY SURVEY.

Covering in all 671.87 feet or 40.72 rods.
 Said temporary construction easement contains 1.17 acres, more or less.

Commencing at the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9; thence along the north line of the Northwest Quarter of the Northwest Quarter of said Section 9; an azimuth of 091°44'10" a distance of 8.76 feet to the POINT OF BEGINNING #2; thence on an azimuth of 254°48'02" a distance of 9.16 feet to the POINT OF TERMINATION #2 on the west line of the Northwest Quarter of the Northwest Quarter of said Section 9. Said point is located on an azimuth of 181°44'33" a distance of 2.67 feet from the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9.

And
 Section 9. Said point is located on an azimuth of 091°44'10" a distance of 29.16 feet from the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9.
 POINT OF TERMINATION #1 on the north line of the Northwest Quarter of the Northwest Quarter of said Section 9. Said point is located on an azimuth of 301°03'42" a distance of 53.27 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°42'55" a distance of 4600.32 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°24'50" a distance of 609.44 feet to a point (P1 #2); thence on an azimuth of 301°03'42" a distance of 53.27 feet to the

Commencing at the northeast corner of said Section 9; thence on an azimuth of 271°24'50" a distance of 4600.32 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°42'55" a distance of 609.44 feet to a point (P1 #2); thence on an azimuth of 301°03'42" a distance of 53.27 feet to the POINT OF TERMINATION #1 on the north line of the Northwest Quarter of the Northwest Quarter of said Section 9. Said point is located on an azimuth of 091°44'10" a distance of 29.16 feet from the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9.

And
 Section 9. Said point is located on an azimuth of 091°44'10" a distance of 29.16 feet from the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9.
 POINT OF TERMINATION #1 on the north line of the Northwest Quarter of the Northwest Quarter of said Section 9. Said point is located on an azimuth of 301°03'42" a distance of 53.27 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°42'55" a distance of 4600.32 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°24'50" a distance of 609.44 feet to a point (P1 #2); thence on an azimuth of 301°03'42" a distance of 53.27 feet to the

Commencing at the northeast corner of said Section 9; thence on an azimuth of 271°24'50" a distance of 4600.32 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°42'55" a distance of 609.44 feet to a point (P1 #2); thence on an azimuth of 301°03'42" a distance of 53.27 feet to the POINT OF TERMINATION #1 on the north line of the Northwest Quarter of the Northwest Quarter of said Section 9. Said point is located on an azimuth of 091°44'10" a distance of 29.16 feet from the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9.

And
 Section 9. Said point is located on an azimuth of 091°44'10" a distance of 29.16 feet from the northwest corner of the Northwest Quarter of the Northwest Quarter of said Section 9.
 POINT OF TERMINATION #1 on the north line of the Northwest Quarter of the Northwest Quarter of said Section 9. Said point is located on an azimuth of 301°03'42" a distance of 53.27 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°42'55" a distance of 4600.32 feet to the POINT OF BEGINNING #1 (P1 #1=BOP); thence on an azimuth of 271°24'50" a distance of 609.44 feet to a point (P1 #2); thence on an azimuth of 301°03'42" a distance of 53.27 feet to the

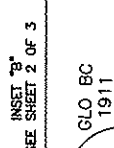
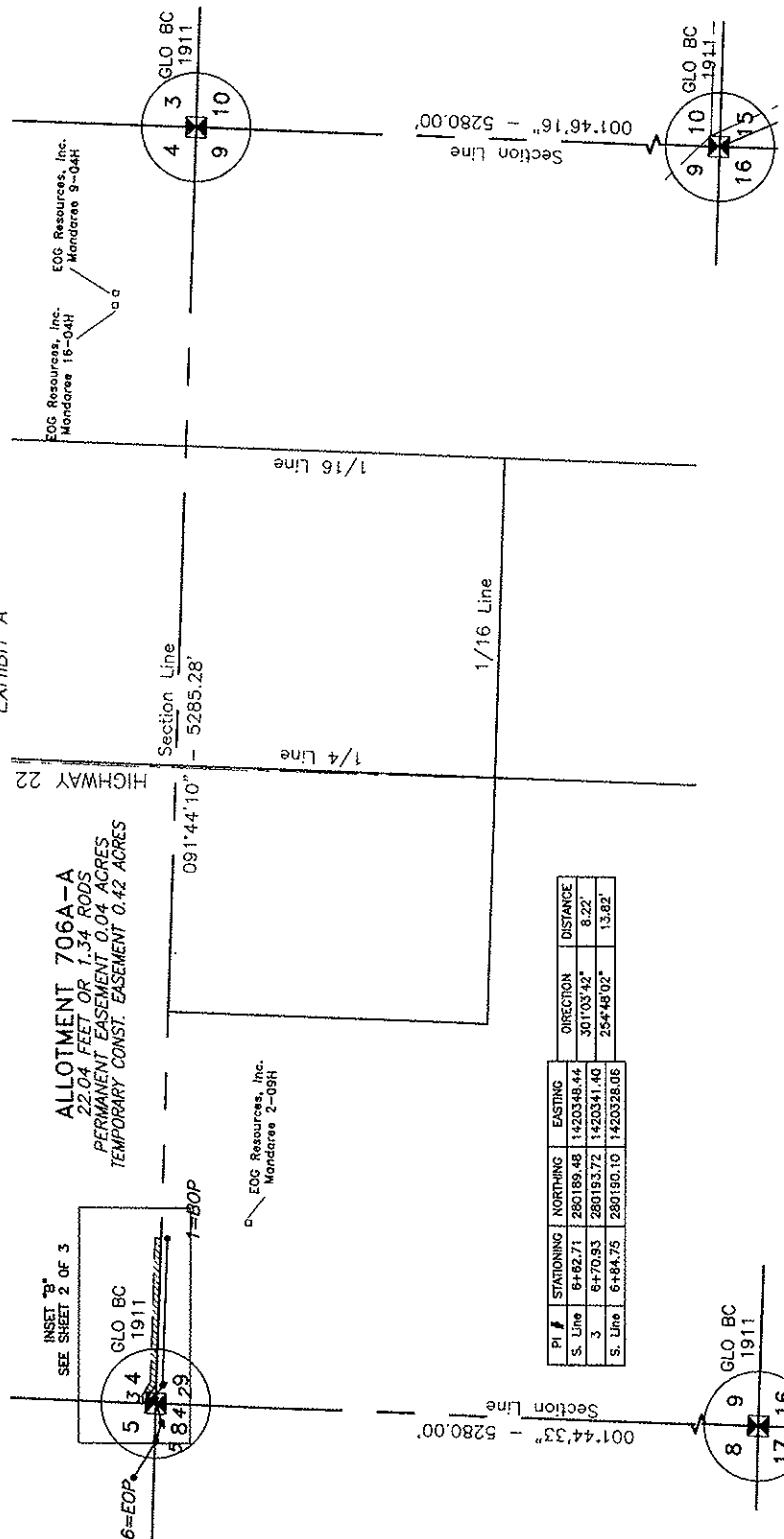
DESCRIPTION: PERMANENT EASEMENT SURVEY
 MANDAREE NORTH LATERAL
 SADDLE BUTTE PIPELINE COMPANY
 EXHIBIT "A"
 NW1/4NW1/4 OF SECTION 9, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA

ALLOTMENT 743A-D

ALLOTMENT 706A-A

SW1/4SW1/4 OF SECTION 4, TOWNSHIP 149 NORTH, RANGE 94 WEST
OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
EXHIBIT "A"

ALLOTMENT 706A-A
22.04 FEET OR 1.34 RODS
PERMANENT EASEMENT 0.04 ACRES
TEMPORARY CONST. EASEMENT 0.42 ACRES



PI #	STATIONING	NORTHING	EASTING	DIRECTION	DISTANCE
S. Line	6+62.71	280189.48	1420348.44	301°03'42"	8.22'
3	6+70.93	280193.72	1420341.40	254°48'02"	13.62'
S. Line	6+84.75	280190.10	1420328.06		

NOTE:
Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.



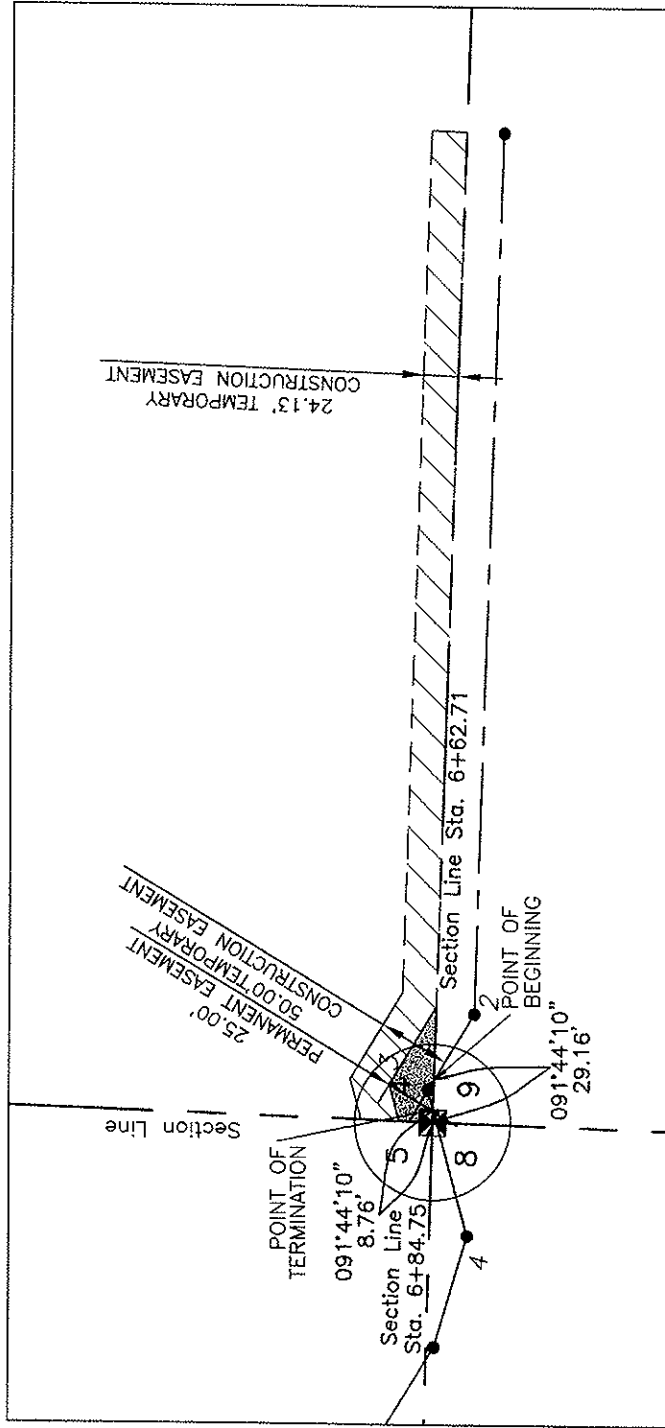
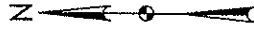
FIELD BOOK: OP-244 PG. 38-37

LEGEND

SYMBOL	ITEM
(Symbol)	GRADED ROAD SHOULDER
(Symbol)	UTILITY MARKERS
(Symbol)	TRAILER MARKERS
(Symbol)	PERMANENT EASEMENT
(Symbol)	TEMPORARY CONST. EASEMENT
(Symbol)	WELL
(Symbol)	BARBED WIRE FENCE
(Symbol)	WELDRITE FENCE
(Symbol)	OVERHEAD POWER LINE
(Symbol)	POWER POLE/STREET LIGHT
(Symbol)	UTILITY MARKER OR SIGN
(Symbol)	TELEPHONE POST/STAKE
(Symbol)	WELL LOCATION

Kadimas Lee & Jackson
SURVEYORS
858 Main Avenue, Suite 301
Durosoy, ND 58130
© Kadimas Lee & Jackson 2011
DRAWN BY: J. TAVIS
DATE: 10/4/2011
SCALE: 1:500
JOB NO. 3710461
DWG NO. MandareeNorth_Ease
SADDLE BUTTE MANDAREE NORTH LATERAL
MCKENZIE COUNTY, NORTH DAKOTA
EASEMENTS ON AND ACROSS THE
SW1/4SW1/4 OF SEC. 4, T.149N., R.94W.

ALLOTMENT 706A-A
 SW1/4SW1/4 OF SECTION 4, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"



LEGEND

SYMBOL	ITEM
[Symbol]	GRADED ROAD SHOULDER
[Symbol]	CATTLE GUARD
[Symbol]	TREE ROWS, BUSHES
[Symbol]	DRAINAGE LINE
[Symbol]	CLAYWET
[Symbol]	BURIED WIRE FENCE
[Symbol]	WOLF FENCE
[Symbol]	POWER POLE POWER LINE
[Symbol]	UTILITY MARKER OR SIGN
[Symbol]	TELEPHONE FRESTAL
[Symbol]	WELL LOCATION

INSET "B"

 Kadmas Lee & Jackson Professional Surveyors 800 North 1st Street, Suite 201 Bismarck, ND 58101 PHONE: 701.223.1234	 S&B Surveying & Blending 888 Main Avenue, Suite 301 Bismarck, ND 58101 PHONE: 701.223.1234	SHEET 2 OF 3 DWG NO. Mandreeworth_Ease JOB NO. 3710461 SCALE: 1:100 PARCEL NUMBER 4-149-94-A	SADDLE BUTTE MANDAREE NORTH LATERAL MCKENZIE COUNTY, NORTH DAKOTA EASEMENTS ON AND ACROSS THE SW1/4SW1/4 of SEC. 4, T.149N., R.94W.
NOTE: Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.		FIELD BOOK: OP-244 PG. 33-37	

DAKOTA BUREAU OF REVENUE Kadmas Lee Jackson 2011 Jackson Lee Kadmas		858 Main Avenue, Suite 301 Durango, CO 81301	DATE: 10/4/2011 TIME: -	EASEMENTS ON AND ACROSS THE SW1/4SW1/4 OF SEC. 4, T.149N., R.94W.	MARKET NUMBER 4-149-94-A
SADDLE BUTTE MANDAREE NORTH LATERAL MCKENZIE COUNTY, NORTH DAKOTA		JOB NO. 3710461		SCALE: NONE	
DWG NO. MondareeNorth_Case		SHEET 3 OF 3		FIELD BOOK: OP-244 PG. 33-37	



I, Myron J. Kadmas, Registered Land Surveyor, N.D. RLS No. 3758, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief. The field survey was performed by Kirk J. Jorgenson on June 14, 2011.

Myron J. Kadmas, Registered Land Surveyor
 N.D. RLS No. 3758
 Date: 10-10-11

NOTES:

1. Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.

2. Descriptions and sketches of easements depicted herein are based on information obtained while conducting the survey for easement acquisition and on deeds supplied by the client, and DO NOT CONSTITUTE THE RESULTS OF A FULL BOUNDARY SURVEY.

DESCRIPTION: PERMANENT EASEMENT SURVEY

A fifty (50) foot wide easement for utilities and pipelines of an oil and gas collection system over, under and across the Southwest Quarter of the Southwest Quarter (SW1/4SW1/4) of Section 4, Township 149 North, Range 94 West of the 5th Principal Meridian, McKenzie County, State of North Dakota, lying twenty-five (25) feet on each side of the following described line:

Commencing at the southwest corner of the southwest Quarter of the Southwest Quarter of said Section 4; thence along the south line of the Southwest Quarter of the Southwest Quarter of said Section 4 on an azimuth of 091°44'10" a distance of 29.16 feet to the POINT OF BEGINNING; thence on an azimuth of 301°03'42" a distance of 8.22 feet to a point (P1 #3); thence on an azimuth of 254°48'02" a distance of 13.82 feet to the POINT OF TERMINATION on the south line of the Southwest Quarter of the Southwest Quarter of said Section 4. Said point is located on an azimuth of 091°44'10" a distance of 8.76 feet from the southwest corner of the Southwest Quarter of the Southwest Quarter of said Section 4.

Covering in all 22.04 feet or 1.34 rods.

Said Permanent easement contains 0.04 acres, more or less.

Together with a fifty (50) foot wide easement for utilities and pipelines of an oil and gas collection system over, under and across the Southwest Quarter of the Southwest Quarter (SW1/4SW1/4) of Section 4, Township 149 North, Range 94 West of the 5th Principal Meridian, McKenzie County, State of North Dakota, lying fifty (50) feet on north side of the following described line:

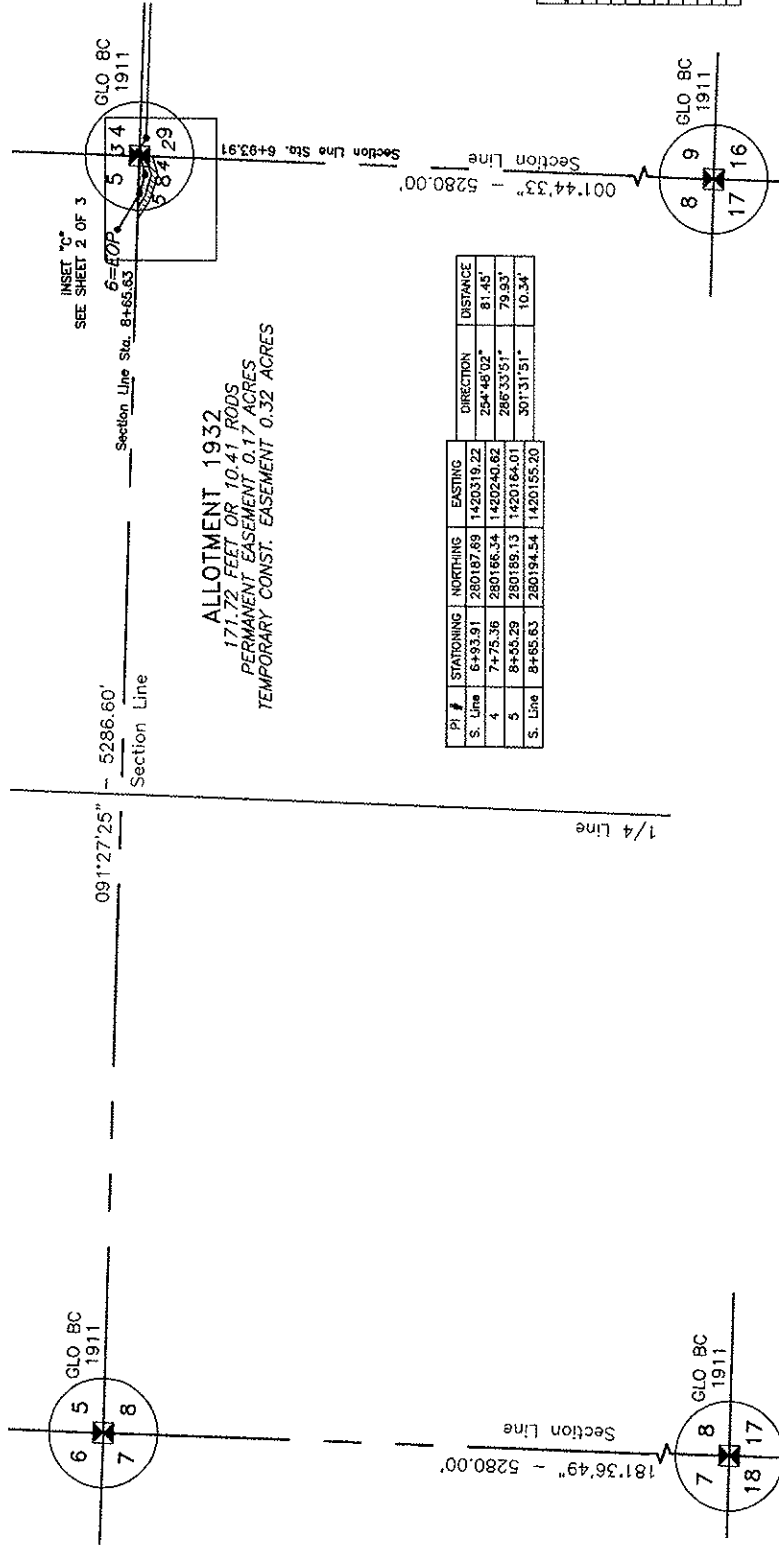
Commencing at the southwest corner of the southwest Quarter of the Southwest Quarter of said Section 4; thence along the south line of the Southwest Quarter of the Southwest Quarter of said Section 4 on an azimuth of 091°44'10" a distance of 29.16 feet to the POINT OF BEGINNING; thence on an azimuth of 301°03'42" a distance of 8.22 feet to a point (P1 #3); thence on an azimuth of 254°48'02" a distance of 13.82 feet to the POINT OF TERMINATION on the south line of the Southwest Quarter of the Southwest Quarter of said Section 4. Said point is located on an azimuth of 091°44'10" a distance of 8.76 feet from the southwest corner of the Southwest Quarter of the Southwest Quarter of said Section 4.

Covering in all 22.04 feet or 1.34 rods.

Said temporary construction easement contains 0.42 acres, more or less.

ALLOTMENT 706A-A
 SW1/4SW1/4 OF SECTION 4, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"
 SADDLE BUTTE PIPELINE COMPANY
 MANDAREE NORTH LATERAL

ALLOTMENT 1932
 NE1/4NE1/4 OF SECTION 8, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"



ALLOTMENT 1932
 177.72 FEET OR 10.41 RODS
 PERMANENT EASEMENT 0.17 ACRES
 TEMPORARY CONST. EASEMENT 0.32 ACRES

PI #	STATIONING	NORTHING	EASTING	DIRECTION	DISTANCE
S. Line	6+93.91	280187.89	1420319.22	254°45'02"	81.45'
4	7+75.36	280186.34	1420240.62	286°33'51"	79.33'
5	8+55.29	280189.13	1420164.01	301°31'51"	10.34'
S. Line	8+65.63	280194.54	1420155.20		

LEGEND

SYMBOL	ITEM
[Symbol]	GRADED ROAD SHOULDER
[Symbol]	CATTLE GUARD
[Symbol]	TREE ROWS, BRUSH
[Symbol]	DRAINAGE LINE
[Symbol]	CONVEY
[Symbol]	EMBED WIRE FENCE
[Symbol]	WOOD FENCE
[Symbol]	CONCRETE POST AND RAIL FENCE
[Symbol]	POWER POLE AND WIRE
[Symbol]	UTILITY MARKER OR SIGN
[Symbol]	TELEPHONE POCKET
[Symbol]	WELL LOCATION

SHEET 1 OF 3
 DWG NO. MandareeNorth_Ease
 JOB NO. 3710461
 SCALE: 1:800
 PROJECT NUMBER: B-149-94-A

NOTE: Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.

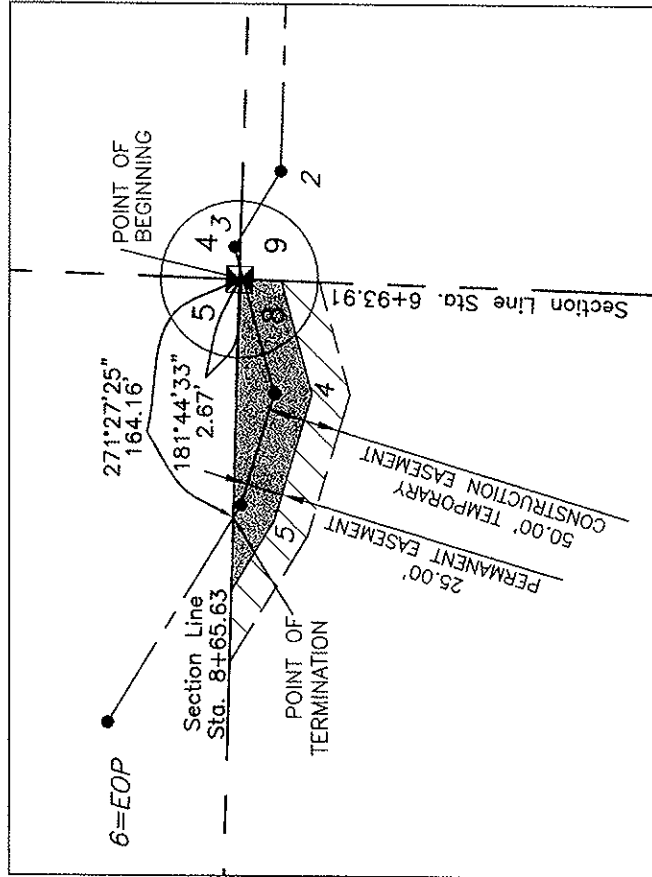
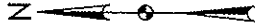


FIELD BOOK: OP-244 PG. 33-37

Kadimas Lee & Jackson
 Professional Surveyors
 858 Main Avenue, Suite 301
 Bismarck, ND 58101
 DATE: 10/4/2011
 BY: [Signature]

SADDLE BUTTE MANDAREE NORTH LATERAL
 MCKENZIE COUNTY, NORTH DAKOTA
 EASEMENTS ON AND ACROSS THE
 NE1/4NE1/4 of SEC. 8, T.149N., R.94W.

ALLOTMENT 1932
 NE1/4NE1/4 OF SECTION 8, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"



LEGEND

SYMBOL	ITEM
[Symbol]	GRADED ROAD SHOULDER
[Symbol]	UTILITY MARKERS
[Symbol]	TEMPORARY EASEMENT
[Symbol]	PERMANENT EASEMENT
[Symbol]	CLAYVERT
[Symbol]	BARRIED WIRE FENCE
[Symbol]	WALDOPE FENCE
[Symbol]	OVERHEAD POWER LINE
[Symbol]	POWER POLE/STREET LIGHT
[Symbol]	UTILITY MARKER OR SIGN
[Symbol]	TELEPHONE POST/POL
[Symbol]	WELL LOCATION

SHEET 2 OF 3
 DWG NO. MandareeNorth_Ease
 JOB NO. 3710461
 SCALE: 1:100
 PLOTTER NUMBER 8-149-94-A

SADDLE BUTTE MANDAREE NORTH LATERAL
 MCKENZIE COUNTY, NORTH DAKOTA
 EASEMENTS ON AND ACROSS THE
 NE1/4NE1/4 OF SEC. 8, T.149N., R.94W.

Kadmas
Lee & Jackson
 Registered Surveyors
 © Kadmas, Lee & Jackson 2011
 PHONE 815-1-7425
 OFFICE 10/4/2011
 DATE
 888 Main Avenue, Suite 301
 Durango, CO 81301
 SADDLE BUTTE SURVEYING & ENGINEERING, LLC



FIELD BOOK: OP-244 P.G. 33-37

NOTE:
 Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.

DWG NO. MandareeNorth_Coas JOB NO. 3710461 SCALE: NONE PLOT NUMBER: 8-149-94-A		DATE: 10/10/2011 TIME: 10:11:14 AM	858 Main Avenue, Suite 301 Durango, CO 81301 SADDLE BUTTE PIPELINE, L.L.C. SPP	© Kadmas, Inc. 2011 Jackson Lee & Kadmas
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FIELD BOOK: OP-244 PG. 33-37 SHEET 3 OF 3

ALLOTMENT 1932
NE1/4NE1/4 OF SECTION 8, TOWNSHIP 149 NORTH, RANGE 94 WEST
OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
EXHIBIT "A"
SADDLE BUTTE PIPELINE COMPANY
MANDAREE NORTH LATERAL

DESCRIPTION: PERMANENT EASEMENT SURVEY

A fifty (50) foot wide continual easement for utilities and pipelines of an oil and gas collection system over, under and across the Northeast Quarter of the Northeast Quarter (NE1/4NE1/4) of Section 8, Township 149 North, Range 94 West of the 5th Principal Meridian, McKenzie County, State of North Dakota, lying twenty-five (25) feet on each side of the following described line:

Commencing at the northeast corner of the Northeast Quarter of said Section 8; thence along the east line of the Northeast Quarter of said Section 8 on an azimuth of 181°44'33" a distance of 2.67 feet to the POINT OF BEGINNING; thence on an azimuth of 254°48'02" a distance of 81.45 feet to a point (P1 #4); thence on an azimuth of 286°33'51" a distance of 79.93 feet to a point (P1 #5); thence on an azimuth of 301°31'51" a distance of 10.34 feet to the POINT OF TERMINATION on the north line of the Northeast Quarter of said Section 8. Said point is located on an azimuth of 271°27'25" a distance of 164.16 feet from the northeast corner of the Northeast Quarter of the Northeast Quarter of said Section 8.

Covering in all 171.72 feet or 10.41 rods.

Said Permanent easement contains 0.17 acres, more or less.

Together with a seventy-five (75) foot wide temporary construction easement for utilities and pipelines of an oil and gas collection system over, under and across the Northeast Quarter of the Northeast Quarter (NE1/4NE1/4) of Section 8, Township 149 North, Range 94 West of the 5th Principal Meridian, McKenzie County, State of North Dakota, lying twenty (25) feet on north side and fifty (50) feet on the south side of the following described line:

Commencing at the northeast corner of the Northeast Quarter of the Northeast Quarter of said Section 8; thence along the east line of the Northeast Quarter of the Northeast Quarter of said Section 8 on an azimuth of 181°44'33" a distance of 2.67 feet to the POINT OF BEGINNING; thence on an azimuth of 254°48'02" a distance of 81.45 feet to a point (P1 #4); thence on an azimuth of 286°33'51" a distance of 79.93 feet to a point (P1 #5); thence on an azimuth of 301°31'51" a distance of 10.34 feet to the POINT OF TERMINATION on the north line of the Northeast Quarter of the Northeast Quarter of said Section 8. Said point is located on an azimuth of 271°27'25" a distance of 164.16 feet from the northeast corner of the Northeast Quarter of the Northeast Quarter of said Section 8.


Covering in all 171.72 feet or 10.41 rods.

Said temporary construction easement contains 0.32 acres, more or less.

1. Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot Azimuths shown distance to ground distance.

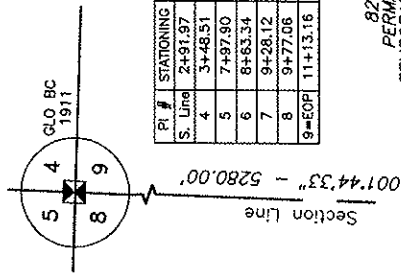
2. Descriptions and sketches of easements depicted herein are based on information obtained while conducting the survey for easement acquisition and on deeds supplied by the client, and DO NOT CONSTITUTE THE RESULTS OF A FULL BOUNDARY SURVEY.

I, Myron J. Kadmas, Registered Land Surveyor, N.D. RLS No. 3758, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief. The field survey was performed by Kirk J. Jorgenson on June 14, 2011.



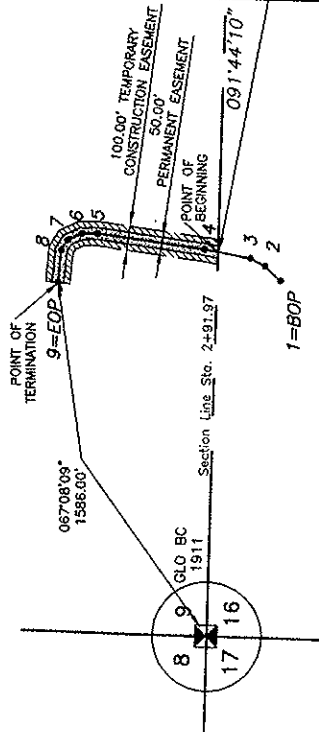
Date: 10-10-11
 Myron J. Kadmas, Registered Land Surveyor
 N.D. RLS No. 3758

ALLOTMENT 742A
 SW1/4 OF SECTION 9, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"

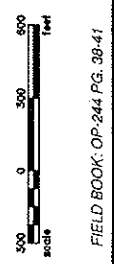


PI. #	STATIONING	NORTHING	EASTING	DIRECTION	DISTANCE
S. Line	2+91.97	274864.56	1421750.37	011°15'24"	56.54'
4	3+48.51	274920.02	1421761.41	007°59'06"	449.39'
5	7+97.90	275365.05	1421823.83	389°50'17"	85.45'
6	8+53.34	275430.50	1421823.65	335°53'34"	64.77'
7	9+28.12	275489.62	1421797.19	301°40'08"	48.94'
8	9+77.06	275515.32	1421755.53	275°47'15"	136.10'
9=EOP	11+13.16	275529.04	1421620.13		

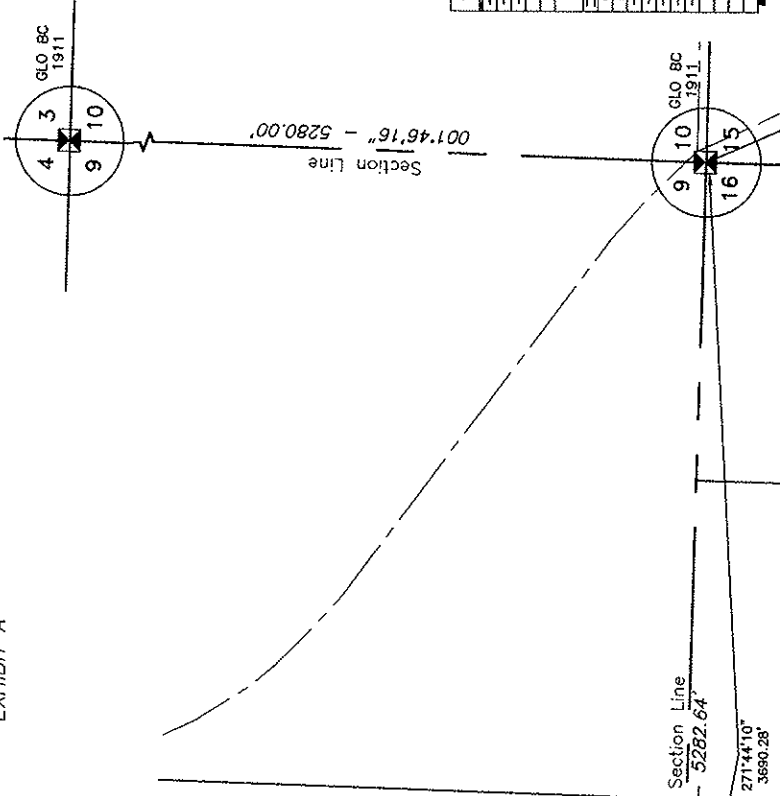
ALLOTMENT 742A
 821.19 FEET OR 49.77 RODS
 PERMANENT EASEMENT 0.94 ACRES
 TEMPORARY CONST. EASEMENT 1.89 ACRES



NOTE:
 Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.



FIELD BOOK: OP. 244 PG. 38-41



LEGEND

SYMBOL	ITEM
---	SECTION LINE
---	1/2 LINE
---	3/4 LINE
---	SECTION CORNER - ORIGINAL STAKE
---	SECTION CORNER - IRON REBAR
---	WITH 1/2\"/>
---	GRADED ROAD SHOULDER
---	CATTLE GUARD
---	TREE, BUMP, BERRIES
---	DRAINAGE LINE
---	OBSTACLE
---	BARBED WIRE FENCE
---	CORNER MARKER
---	POWER POLE/STREET LIGHT
---	UTILITY MARKER OR SIGN
---	TELEPHONE POST/STAKE
---	WELL LOCATION

SHEET 1 OF 2

 Kadmas Lee & Jackson Engineers, Surveyors 888 Main Avenue, Suite 301 Durango, CO 81301 PHONE: 970.241.1445 FAX: 970.241.1446	DWG NO. MckenzieSouth_Easement JOB NO. 3710461 SCALE: 1:800 PAPER NUMBER 9-149-94-A
	SADDLE BUTTE MANDAREE SOUTH LATERAL MCKENZIE COUNTY, NORTH DAKOTA EASEMENTS ON AND ACROSS THE SW1/4 OF SEC. 9, T.149N., R.94W.

DWG NO. MANDAREE SOUTH LATERAL JOB NO. 3710461 SCALE: NONE PROJECT NUMBER 9-149-94-A LAYOUT: 9-149-94-A (2)		SW1/4 OF SEC. 9, T.149N., R.94W. EASEMENTS ON AND ACROSS THE		DATE: 9/20/2011 TIME: 3:33pm DRAWN BY: J. TANS
SADDLE BUTTE MANDAREE SOUTH LATERAL MCKENZIE COUNTY, NORTH DAKOTA		858 Main Avenue, Suite 301 Durango, CO 81301 DAKOTA SURVEYING & ENGINEERING, P.C.		Kadmas Lee & Jackson Professional Engineers Kadmas Lee & Jackson 2011

FIELD BOOK: OP-244 PG. 38-41
SHEET 2 OF 2



Date: 10-4-11
 Myron J. Kadmas, Registered Land Surveyor, N.D. RLS No. 3758
 I, Myron J. Kadmas, Registered Land Surveyor, N.D. RLS No. 3758, do hereby certify that the survey plat shown hereon was made by me, or under my direction, from notes made in the field, and the same is true and correct to the best of my knowledge and belief. The field survey was performed by Kirk J. Jorgenson on June 14, 2011.

NOTES:
 1. Survey is based on North Dakota State Plane System, NAD83 (96), North Zone, Int. Foot. Azimuths shown are Grid Azimuths, distances shown are grid distance. Combined scale factor = 1.000147240 to go from grid distance to ground distance.
 2. Descriptions and sketches of easements depicted herein are based on information obtained while conducting the survey for easement acquisition and on deeds supplied by the client, and DO NOT CONSTITUTE THE RESULTS OF A FULL BOUNDARY SURVEY.

DESCRIPTION: PERMANENT EASEMENT SURVEY

A fifty (50) wide continual easement for utilities and pipelines of on oil and gas collection system over, under and across the Southwest Quarter (SW1/4) of Section 9, Township 149 North, Range 94 West of the 5th Principal Meridian, McKenzie County, State of North Dakota, lying fifty (50) feet on each side of the following described line:

Commenting at the southeast corner of Section 9; then along the south line of said Section 9 on an azimuth of 271°44'10" a distance of 3690.28 feet to the POINT OF BEGINNING; then on an azimuth of 011°15'24" a distance of 56.54 feet to a point (PI #4); then on an azimuth of 007°59'06" a distance of 449.39 feet to a point (PI #5); then on an azimuth of 359°50'17" a distance of 65.45 feet to a point (PI #6); then on an azimuth of 335°53'34" a distance of 64.77 feet to a point (PI #7); then on an azimuth of 301°40'08" a distance of 48.94 feet to a point (PI #8); then on an azimuth of 275°47'15" a distance of 136.10 feet to the POINT OF TERMINATION (PI #9=EQP). Said point is located on an azimuth of 067°08'09" a distance of 1586.00 feet from the southwest corner of said Southwest Quarter of Section 9.

Said permanent easement contains 0.94 acres, more or less.

Covering in all 821.19 feet or 49.77 rods.

Together with a one hundred (100) foot wide temporary construction easement for utilities and pipelines of on oil and gas collection system over, under and across the Southwest Quarter (SW1/4) of Section 9, Township 149 North, Range 94 West of the 5th Principal Meridian, McKenzie County, State of North Dakota, lying fifty (50) feet on each side of the following described line:

Commenting at the southeast corner of Section 9; then along the south line of said Section 9 on an azimuth of 271°44'10" a distance of 3690.28 feet to the POINT OF BEGINNING; then on an azimuth of 011°15'24" a distance of 56.54 feet to a point (PI #4); then on an azimuth of 007°59'06" a distance of 449.39 feet to a point (PI #5); then on an azimuth of 359°50'17" a distance of 65.45 feet to a point (PI #6); then on an azimuth of 335°53'34" a distance of 64.77 feet to a point (PI #7); then on an azimuth of 301°40'08" a distance of 48.94 feet to a point (PI #8); then on an azimuth of 275°47'15" a distance of 136.10 feet to the POINT OF TERMINATION (PI #9=EQP). Said point is located on an azimuth of 067°08'09" a distance of 1586.00 feet from the southwest corner of said Southwest Quarter of Section 9.

Said temporary construction easement contains 1.89 acres, more or less.

Covering in all 821.19 feet or 49.77 rods.

ALLOTMENT 742A
 SW1/4 OF SECTION 9, TOWNSHIP 149 NORTH, RANGE 94 WEST
 OF THE 5TH PRINCIPAL MERIDIAN, MCKENZIE COUNTY, NORTH DAKOTA
 EXHIBIT "A"
 SADDLE BUTTE PIPELINE COMPANY
 MANDAREE SOUTH LATERAL

Notice of Availability and Appeal Rights

Saddle Butte Pipeline: Mandaree Cut Across 5-16 and 2-09

The Bureau of Indian Affairs (BIA) is planning to issue administrative approvals related to an Environmental Assessment to Authorize Land Use for the Mandaree Cut Across 5-16 and 2-09 pipeline on the Fort Berthold Reservation as shown on the attached map. Construction by Saddle Butte Pipeline, LLC is expected to begin in 2011.

An environmental assessment (EA) determined that proposed activities will not cause significant impacts to the human environment. An environmental impact statement is not required. Contact Earl Silk, Superintendent at 701-627-4707 for more information and/or copies of the EA and the Finding of No Significant Impact (FONSI).

The FONSI is only a finding on environmental impacts – it is not a decision to proceed with an action and *cannot* be appealed. BIA's decision to proceed with administrative actions *can* be appealed until December 2, 2011, by contacting:

**United States Department of the Interior
Office of Hearings and Appeals
Interior Board of Indian Appeals
801 N. Quincy Street, Suite 300, Arlington, Va 22203.**

Procedural details are available from the BIA Fort Berthold Agency at 701-627-4707.

Project locations

