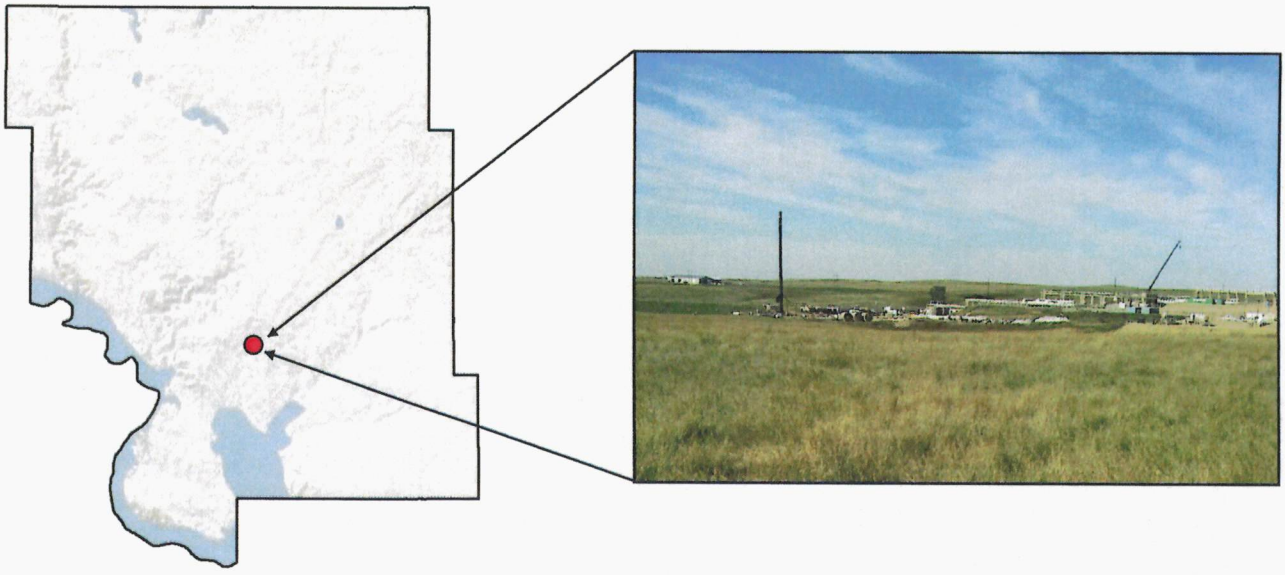
October 2013

APPLICATION TO NORTH DAKOTA PUBLIC SERVICE COMMISSION FOR A CERTIFICATE OF SITE COMPATIBILITY

ROBINSON LAKE GAS PLANT EXPANSION

Mountrail County, ND



WHITING

TABLE OF CONTENTS

INTRODUCTION

Whiting Oil and Gas Corporation's (Whiting) parent company, Whiting Petroleum Corporation, is an independent oil and gas company that explores for, develops, acquires and produces crude oil, natural gas liquids (NGLs) and natural gas primarily in the Rocky Mountain, Permian Basin, Mid-Continent, Michigan and Gulf Coast regions of the United States. The Company's largest projects are in the Bakken and Three Forks plays in North Dakota, Niobrara play in Colorado and its Enhanced Oil Recovery fields in Oklahoma and Texas.

Whiting began exploration and production work for oil and gas from the Bakken formation in 2007. In conjunction with oil field production, Whiting constructed the Robinson Lake Gas Plant (RLGP or Plant) to process the well-head gas produced from the wells that it planned to develop. The Plant was originally designed to provide exclusive service to company wells by providing 3 million standard cubic feet per day (MMSCFD) capacity. Whiting's net crude oil production from the Sanish field, which is serviced by the RLGP has continued to increase since it entered the region; the net production from this field in 2012 totaled 11.4 MMBOE, an average of 31,081 BOE per day, representing a 40% increase over 2011. The increased oil production has come with a comparable increase in gas production at the well-head resulting in increased demand for regional gas processing. Additionally, since RLGP has begun operating, Whiting has been approached and has accommodated third party requests for gas processing services. As such, incremental modifications to the Plant have been conducted since it began operating; these efforts have been in response to the increased production as well the requests of third parties seeking access to Whiting's gas processing capabilities. By the close of 2013 the Plant will have a design capacity of 97.5 MMSCFD, however regional production forecasts support increasing the production capacity beyond its current level.

In response to growing demand for gas processing capacity of NGLs produced in North Dakota, Whiting proposes to expand their existing Plant. The Robinson Lake Gas Plant Expansion Project (Project) will address the growing demand for added gas processing capacity in the region. Whiting's proposed plant expansion would be located approximately 8 miles northeast of New Town in Mountrail County.

Whiting hereby submits to the North Dakota Public Service Commission (PSC or Commission) a single filing containing a request for waiver or reduction of procedures and time schedules and an application for a Certificate of Site Compatibility for its Project.

This application provides the necessary information as stipulated by the North Dakota Century Code, Energy Conversion and Transmission Facility Siting Act, Chapter 49-22-08; and the PSC Administrative Code, Chapter 69-06-08-01 Energy Conversion Facility Siting Criteria.

The information presented in this application is presented in the following five main categories:

SECTION 1: WAIVER REQUEST
SECTION 2: DESCRIPTION
SECTION 3: STUDIES
SECTION 4: NEED FOR FACILITY
SECTION 5: LOCATION

To assist the Commission in its review of Whiting's application, Whiting has included with this application the information described in Section 49-22-09 of the Century Code, Factors to Consider in Evaluating Applications and Designation of Sites, Corridors, and Routes. This information is placed toward the end of Section D, following the discussion of the Facility Siting Criteria.

SECTION 1: WAIVER REQUEST

Whiting, in conjunction with its submission of this application for a Certificate of Site Compatibility for the Project, submits to the Commission this request for a waiver or reduction of procedures and time schedules set forth in Chapter 49-22 of the North Dakota Century Code and Article 69-06 of the North Dakota Administrative Code. In accordance with Section 49-22-07.2 of the North Dakota Century Code and Chapter 69-06-06 of the North Dakota Administrative Code, Whiting requests that the Commission waive the requirements for mylar maps as set forth in the Commission's Energy Conversion and Transmission Facility Siting Guidelines for a Certificate of Site Compatibility. Geographic Information System (GIS) maps that meet the intent of the Commission's requirements are provided in the consolidated application for a Certificate of Corridor Compatibility and Route Permit.

Whiting respectfully requests that the Commission grant the requested waiver in order to prevent potentially significant delays to the proposed Project. As discussed herein this consolidated application for a Certificate of Site Compatibility, the Project is of such design, location and purpose as to result in minimal adverse impacts to the environment while offering 12.5 MMcfd (million cubic feet per day) of gas processing capacity from its existing RLGP facility.

SECTION 2: DESCRIPTION

2.1 Type

Whiting's Project would be located approximately 8 miles northeast of New Town, North Dakota. As proposed, the facility expansion would result in modifications within existing facility that currently occupies the 35 acre plot located in the NW ¼, Section 23, Township 153 North, Range 91 West in Mountrail County, as depicted in the map included in Appendix B.

The Plant was originally constructed in 2007 to process gas produced by Whiting from oil production in the Sanish Field. The original plant had a capacity of 3 MMSCFD of gas processing capacity. Since being placed into service, the Plant has been modified and redesigned to meet increased regional demand for gas processing of well-head gas produced by Whiting oil production as well as third party entities active in the area that are also in need of gas processing capacity to control local flaring of well-head gases.

The current design capacity of the RLGP will be 97.5 MMSCFD by the close of 2013. In addition to fundamental propane refrigeration gas processing which removes propane and heavier components to produce Y-Grade NGLs, this facility also operates one 1 fractionation unit that separates the NGLs into marketable constituents including propane, butane, and natural gasoline. To achieve this design capacity Whiting will construct and operate:

- 1 NGL Fractionation Unit (currently in-service and operating)
- 2 Propane Refrigeration Processing Units (currently in-service and operating)
- 12 Compressor Units (10 Units which are currently in-service and operating, 1 Unit to be constructed and placed in-service, and 1 Unit to be constructed as a reserve Unit to maintain processing operations through scheduled maintenance or emergencies)

Further expansion, scheduled to take place in the first quarter of 2014, to meet increased regional demand for additional gas processing capacity would be accomplished by the addition of two (2) Compressor Units coupled with the redesign of an existing Propane Refrigeration gas processing unit to improve operating efficiency and throughput capacity. These modifications would result in a design capacity for RLGP of 110 MMcfd which would place the facility under the siting authority of the Commission per North Dakota Century Code § 49-22-03(5).

The proposed expansion would occur entirely within the existing fence line of the Plant which occupies approximately 23-acres (Site) of the 35-acre Plot (Plot) owned and developed by Whiting. Construction of the plant expansion will include the modification and/or installation of underground piping, above ground piping and compression. Adjacent areas outside of the existing Plant fence line will remain essentially undeveloped and shall continue to serve as stormwater outfall, vehicle parking, and unused space for potential future expansion.

The processing systems shall all be located entirely within the battery limits of the plant; starting from the inlet gas and condensate piping as they enter the plant. A simplified engineering flow chart depicting the facility's process and an overview plot plan drawing showing the layout of the proposed processing equipment are included in Appendix A.

2.2 Product

The facility will produce Y-Grade NGLs and its fractionated constituents which include propane, butanes, ethane, pentane + and condensate.

2.3 Size and Design

2.3.1 Gross Design Capacity

The Project is designed with a nameplate capacity of 110 MMSCFD. Appendix A includes a Design Data Report, which discusses the nameplate capacity in more detail.

2.3.2 Estimated Thermal Efficiency of the Energy Conversion Process and the Assumptions Upon Which the Estimate is Based

This not applicable to the process.

2.4 Provide One Copy of the Design Data Reports Separate from the Application

See Appendix A for complete Design Data Report.

2.5 Time Schedule

2.5.1 Certificate of Site Compatibility

Whiting seeks a Certificate of Site Compatibility on or about January 15, 2014.

2.5.2 Land Acquisition

This Project will occur entirely within land held in title by Whiting and as such no additional land acquisition is required for this Project.

Whiting purchased a 35 acre parcel from a private party previously. The purchase agreement and for this transaction date to 2007; deed paperwork was filed in 2007 with Mountrail County.

2.5.3 Construction Start Date

Whiting will begin construction of the plant expansion at the Site upon receipt of necessary authorizations. Whiting anticipates a project to begin construction work of the plant no later than March 1, 2014 to meet current schedule commitments.

2.5.4 Construction Completion Date

Whiting anticipates that Plant commissioning activities will occur in two distinct phases. The first phase would be associated with the redesigned existing Propane Refrigeration gas processing unit, the commissioning of this unit would be expected to be initiated in November 2014, followed by full in-service date approximately 30 to 45 days later. The second phase of commissioning would be associated the compressor units which would occur in July 2015, followed by full in-service date of approximately 30 to 45 days later. Site work may continue including restoration though October 2015.

2.5.5 Test Operations

Whiting anticipates final testing will be completed before the end of 2015.

2.6 Commercial Production Data

Product	2013 Annual Production
Residue Gas Production	18,600,000 MMcf
Ethane	23,000,000 gallons
Propane	88,100,000 gallons
Butanes	38,000,000 gallons
Pentanes	16,300,000 gallons
Condensates	122,000 gallons

2.7 Any Expansions or Additions

At this time, Whiting has no other funded expansion plans for this Plant.

SECTION 3: STUDIES

3.1 Study Area

The Study Area is defined by the approximately 1-mile-wide buffer area centered upon the Project site. The Project and the Study Areas are depicted in the maps found in Appendix B: Exclusion and Avoidance Areas, and Aerial Photography. The environmental analysis was conducted for the entire Study Area of which limit is delineated by the dashed line.

3.2 Site

Whiting owns a 35-acre Plot, of which the existing RLGP occupies 23-acres of this Plot. The Project will occur entirely within the 23-acre Site that RLGP currently occupies as depicted in the maps found in Appendix B. The remaining 12 acres of the Plot remain largely undeveloped and shall serve as a stormwater outfall, vehicle parking and unused space for potential future development. A natural resource inventory was conducted on the Site. Resources inventoried included habitat analysis, wetland delineation, and tree/shrub inventory. Cultural resource field studies were also conducted throughout the entire parcel.

Whiting initiated consultations with the federal and state agencies identified below for the purpose of environmental resource assessment relative to the potential impacts associated with the siting and construction of the proposed Plant expansion at this location. Please refer to Appendix C for copies of these consultations.

U.S. Fish and Wildlife Service (FWS);
North Dakota Game and Fish Department (GFD);
North Dakota Parks and Recreation Department (PRD);
North Dakota State Historic Preservation Office (SHPO); and
North Dakota Department of Health (NDDoH).

Consultations and field studies are summarized as follows:

3.3 Environmental Analysis

3.3.1 Natural Resource Inventory

Whiting retained E3 Environmental, LLC (E3 Environmental) to conduct a natural resource inventory of the Site. The inventory of the Site was conducted to determine the presence or absence of wetlands, waterbodies, and protected species and critical habitat. A tree/woody shrub inventory of the Site was also completed. The inventory

and field studies were completed on September 13, 2013. A copy of the report can be found in Appendix D.

The 35 acre Plot is currently occupied by a 23 acre natural gas plant currently operating with 85 MMSCFD design capacity. Construction is underway to install additional compression units which will increase the design capacity to 97.5 MMSCFD by the end of 2013. Future construction would add an additional 12.5 MMSCFD capacity that would occur from the proposed facility development within the existing developed site. The 35-acre Plot includes approximately 12 acres of undeveloped land on the southwest portion of the property limit. The vegetation of this area is comprised of northwestern Great Plains mixed-grass prairie. Crane Creek passes through this portion of the Plot flowing northwest to southeast and drains to the Van Hook Arm of Lake Sakakawea approximately 6.5 miles south of the Site.

3.3.1.1 Botanical Inventory

The 23 acres on which the Project will be located is a maintained gravel pad with no vegetation present. No trees, shrubs, herbs or woody vines were observed in this area.

The undeveloped portion of the Plot, south of the Site, consists of mixed-grass prairie dominated by smooth brome grass (*Bromus inermis*), prairie cordgrass (*Spartina pectinata*), wild millet (*Echinochloa crus-galli*), ox-eye sunflower (*Heliopsis helianthoides*), wild bergamot (*Monarda fistulosa*), giant goldenrod (*Solidago gigantea*), curly dock (*Rumex crispus*), salsify (*Tragopogon porrifolius*), western snowberry (*Symphoricarpos occidentalis*), prairie sage (*Artemisia ludoviciana*), common yarrow (*Achillia millefolium*), wild licorice (*Glycyrrhiza lepidota*), purple coneflower (*Echinacea purpurea*), and prairie coneflower (*Ratibida columnifera*).

3.3.1.2 Tree/Sapling/Shrub Inventory

The 23-acre Site is occupied by the existing natural gas plant which is a maintained gravel pad with no vegetation present. No trees, saplings, shrubs, or woody vines were observed on the Site.

3.3.1.3 Wetland and Waterbodies Inventory

National Wetland Inventory (NWI) mapping for the area does not indicate the presence of wetlands within the Site. The nearest mapped NWI wetland is a PEMC (Palustrine Emergent Seasonally Flooded) wetland approximately 0.25-mile southeast of the Site. No areas within the 23-acre Site met any of the three mandatory wetland indicators of presence of hydrophytic vegetation, wetland hydrology, or hydric soils. The Site consisted entirely of a well-drained, maintained gravel pad with no vegetation present. A topographic map, aerial photographs and Site photographs are included in the Natural Resources report in Appendix D.

Crane Creek is the nearest waterbody. Crane Creek is an ephemeral feature south of the Site, and drains to the south to the Van Hook Arm of Lake Sakakawea approximately 6.5 miles south of the Site.

3.3.1.4 Wildlife Inventory

Species commonly associated with northwestern Great Plains mixed-grass prairie and agricultural communities may be present in the area. Various common avian and mammalian fauna were observed. No federal or state species of concern were observed on the Site.

3.3.2 U.S. Fish and Wildlife Service

The FWS administer several natural resource programs designed to identify and protect various plant and animal species of special status including habitats deemed critical. Whiting's efforts thus far to engage the FWS in consultation for purpose of identifying and addressing potential concerns are detailed in the following sections.

3.3.2.1 Federally Protected Species Review

Under the authority of the Endangered Species Act, the FWS assesses wildlife populations for viability throughout their current and historic ranges. Species characterized as Threatened or Endangered and their critical habitats are identified and managed under the FWS ESA program.

E3 Environmental provided Whiting technical assistance with protected species review and subsequent consultations with the FWS. A review of the FWS published data identified the following listed species with the potential to occur within the Study Area:

Least tern (*Sterna antillarum*) – Endangered
Whooping crane (*Grus americana*) – Endangered
Piping lover (*Charadrius melodus*) – Threatened
Pallid sturgeon (*Scaphirhynchus albus*) – Endangered
Gray wolf (*Canis lupus*) – Endangered
Sprague's pipit (Anthus spragueii) – Candidate
Dakota skipper (Hesperia dacotae) - Candidate

E3 Environmental has reviewed the available data describing the life history, critical habitat, and conservation measures associated with each species to evaluate the potential effects of the Project on these resources, the results of this analysis is as follows:

Least tern: The interior population(s) of the least tern has historically been associated with large river systems for breeding and migratory habitats. Breeding birds are known to breed colonies, utilizing sandbar habitat common to larger rivers.

In North Dakota, the least tern is found primarily on the Missouri River from Garrison Dam south to Lake Oahe, and on the Missouri and Yellowstone Rivers upstream of Lake Sakakwea (USFWS 1990, 2010). No terns or their habitat were observed on the Site.

Whooping crane: The whooping crane is a large bodied marsh species that breeds primarily in Canada and winters in the Gulf of Mexico. This species has been closely studied and monitored in recent years due to its small population. North Dakota provides migratory habitat for the species, providing roosting and feeding opportunities during migration. This species prefers larger wetland complexes for roosting habitat, typically using adjacent uplands for foraging opportunities. The Project is located within the fenced perimeter of an existing facility, a prominent feature within the existing landscape, which would serve as a deterrent to migrating cranes arriving in the vicinity of the Project. As such, the proposed Project area is unlikely to support whooping crane migratory stopover.

Piping plover: The piping plover is associated with shorelines along small alkaline lakes, large reservoir beaches, and river islands and adjacent sand pits. Breeding birds select wide beaches with highly clumped vegetation covering less than 25% of the area. Regionally the Missouri River, 6.5 miles from the Project site, is known to host breeding populations of the plovers. It is unlikely that migrating piping plover would visit the Project area during migration. The Project site is not located within designated piping plover critical habitat.

Pallid sturgeon: The pallid sturgeon is known to occur in the Missouri River below Fort Peck Dam to the headwaters of Lake Sakakawea. The GFD have caught and released pallid sturgeon in nets in Lake Sakakawea between New Town and Van Hook. Crane Creek is a tributary to the Van Hook Arm of Lake Sakakwea approximately 6.5 miles from the proposed Project site. This species is sensitive to changes in water quality due to turbidity, water temperature, and flow. Construction activities, hydrostatic testing, and plant operations will use best management practices to avoid potential pollution from adversely affect water quality.

Gray wolf: The gray wolf is a large carnivore that through conservation measures has experienced strong population recovery, particularly in the Great Lakes states of the upper Midwest. As populations rebound, individuals may break from packs to explore opportunities to establish packs in unoccupied territory. Roaming individuals can cover great distances without establishing viable breeding populations in previously unoccupied habitat(s). This species is not tolerant of human disturbance and will

tend to avoid interaction with humans. The activities associated with construction and later plant operations would likely serve as a deterrent to this species.

3.3.2.2 U.S. Fish and Wildlife Service Migratory Bird Treaty Consultation

FWS is responsible for the protection of migratory birds; management of this responsibility has largely focused on protection of the birds while on their breeding grounds during the breeding season. It is generally understood that the FWS defines the breeding season in this region as occurring annually from February 1 through July 15. The Site currently does not support any vegetation, thus no habitat is provided on the Site for wildlife.

On September 12, 2013, Project specific consultations were initiated with the Bismarck, North Dakota office of the FWS. A response from the agency is pending. See Appendix C for a copy of the correspondence.

3.3.3 U.S. Fish and Wildlife Service Managed Lands

Conservation programs such as Waterfowl Production Areas, wetland and grassland easements represent an important tool used by the FWS to identify and manage high quality wildlife habitat. A review of public records failed to identify any of these FWS managed lands in the Project Study Area.

On September 12, 2013, Project specific consultations were initiated with the Bismarck, North Dakota office of the FWS. A response from the agency is pending. See Appendix C for a copy of the correspondence.

3.3.4 North Dakota Game and Fish Department

The GFD have oversight of the state's game and protected species. On September 12, 2013, Project specific consultations were initiated with the GFD. A response from the agency is pending. See Appendix C for a copy of the correspondence.

3.3.5 North Dakota Parks and Recreation Department

The PRD maintains a database comprised of the location and recorded occurrences of plant and animal species of special concern.

On September 12, 2013, E3 Environmental initiated consultations with PRD requesting a Natural Heritage Inventory review of the Site seeking to confirm the absence of state species of special concern at the Site. See Appendix C for a copy of the correspondence. A response from the agency is pending.

3.3.6 North Dakota State Historic Preservation Office

The SHPO is responsible for managing the historic and archaeological resources of the state. SWCA Environmental Consultants (SWCA) was retained by Whiting to survey the Site and report the results to the SHPO.

On September 9, 2013, SWCA conducted a Class I Cultural Resources Literature Search of SHPO records to identify previously completed cultural resource investigations and previously recorded cultural resources within 1 mile of the Site. Seven previous cultural resource inventories have been conducted in the area between 1995 and 2011. The Class I search identified five previously recorded cultural resources within 1 mile of the Project area. These sites either remain unevaluated or are not eligible for the National Register of Historic Places status.

On September 13, 2013, SWCA conducted a Class III Cultural Resource inventory of the Site. Archaeologists completed a pedestrian survey of the 23 acre Site. The Site is generally described as developed land. No cultural resources were identified by the Class III survey.

SWCA prepared a Negative Results Report that detailed results from the literature search and survey. The report recommended no further cultural resource work. See Appendix E for a copy of this report.

On September 30, 2013, the SHPO concurred with the "No Significant Sites" determination offered for this Project. See Appendix C for a copy of the correspondence.

3.3.7 North Dakota Department of Health

The NDDoH administers regulatory programs governing the state's interest in air quality and water discharges. Whiting is currently engaged at various stages in the permitting process with the NDDoH with respect to air emissions and water discharges.

3.3.7.1 North Dakota Department of Health Air Quality

The NDDoH administers the state's air quality protection programs. Whiting is applying for the required permits for construction and operation of a few new emission sources. Equipment such as electric-driven compressors, heat exchangers, heaters, storage vessels, flares, and other ancillary equipment could be regulated emission sources and will be included in the permit application required by NDDoH for the construction and operation of air emission sources. Additionally, Whiting will obtain a permit for a temporary concrete batch plant if one is sited on location during construction.

Whiting's design plans include incorporating the necessary control measures to reduce total emissions for the Plant and ascertain compliance with all state and federal rules. The estimated emission reduction has not yet been finalized. The total estimated emissions for the plant have not been finalized.

Whiting will obtain a NDDoH Air Pollution Control Permit to Construct that will address net potential emissions from the Plant. The permit is required prior to construction initiation of new stationary emission sources. Once the new emission sources at the Plant are constructed and begin initial operation, Whiting will notify the NDDoH, as required in the Permit to Construct, and will procure an Operating Permit for the facility, as required.

3.3.7.2 North Dakota Department of Health Pollution Discharge Elimination System

The North Dakota Pollution Discharge Elimination System (ND PDES) is regulatory program that regulates water discharges. Whiting will procure the following ND PDES permits from the NDDoH for regulated discharges associated with the construction and operation of the Plant.

Construction Stormwater: Whiting will be seeking coverage under NDR10-0000 *Authorization to Discharge Under the North Dakota Pollutant Discharge Elimination System* general permit for construction sites as required when disturbing an area greater than five (5) acres during construction. A Project specific erosion control plan referred to as Storm Water Pollution Prevention Plan (SWPPP) will be prepared and maintained on-site for the duration of the Project. Whiting will properly implement the SWPPP which will be designed to manage run-off in a manner that will minimize exposure to chemicals, waste, or petroleum products as well as describing erosion control measures designed to minimize off-site transfer of sediments. Whiting will be seeking coverage for this Project by amending an existing open construction stormwater permit (NDR102146) originally issued on August 26, 2009, NDR102146; this permit will remain in effect until final restoration.

Construction site dewatering: Whiting will be seeking coverage under NDG07-0000 *Authorization to Discharge Under the North Dakota Pollutant Discharge Elimination* a general permit for various temporary discharges including both construction site dewatering and hydrostatic test water discharges. Site dewatering is required when groundwater infiltrated excavations (e.g., foundations and trenches) must be removed. Discharges are managed to minimize scouring and off-site transfer of sediments. Discharges are monitored and water quality samples will be collected, analyzed and reported as stipulated by the general permit.

Industrial Discharges: Whiting understands that the plant will be exempt from a requirement to obtain an industrial discharge permit of stormwater. The facility's SIC code is 1321, which is exempt from stormwater permit requirements. Additionally, Whiting has developed a no-contact facility which is also eligible for exempt status, but requires an NDDoH review of the facility and stormwater control measures.

SECTION 4: NEED FOR FACILITY

4.1 Analysis of Need Based on Present and Projected Demand, Including System Studies

Recent technological advances in drilling and completion associated with horizontal wells currently employed in the Bakken Shale and Three Forks formations of the Williston Basin has dramatically increased hydrocarbon production in the area. In addition to technological advances, area drilling activity has increased measurably. Natural gas production in North Dakota reached a record high in June 2013 at 931 MMcfd, up nearly 4 percent from May 2013. The rig count in July 2013 was 186. Permitting activity in North Dakota increased from 165 permits issued in June to 179 permits issued in July and is projected to continue to increase through winter. Flaring of natural gas in North Dakota fell below 28 percent in June 2013 to a 22-month low of 27.6 percent according to statistics provided by the Oil and Gas Division of North Dakota Industrial Commission's Department of Mineral Resources. Flaring began a steady increase in April 2011, reaching a peak of 35.8 percent in September 2011. While there has been much fluctuation in the flaring percentages since the September 2011 peak, there has since been a distinct downward trend. In addition to the overall decline in flaring, the percent of wells flared in the state due to a lack of pipeline infrastructure in June fell to approximately 13 percent, an indication that gathering infrastructure is catching up with production. While progress continues on flaring in North Dakota, operators continue to seek permission from the North Dakota Industrial Commission to flare wells in areas where gas gathering infrastructure is still not available including the Sanish field in Mountrail County which feeds the RLGP.

Whiting's Sanish field in Mountrail County, North Dakota encompasses approximately 107,800 gross (66,100 net) developed and undeveloped acres. Net production in the Sanish field averaged 32.6 MMBOE/d for the fourth quarter of 2012, representing a 4% increase from 31.4 MMBOE/d in the third quarter of 2012. Whiting's NGL production increased by 450 MBbl (thousand barrels) at their Sanish and Parshall fields in 2011 due to an increase in the number of wells connected to the RLGP during the previous twelve months. As of December 31, 2012, Whiting had seven drilling rigs active in the Sanish field. Two of these rigs are drilling multiple wells from the same drilling location or well pad ("pad drilling"). Whiting plans to initiate a higher density pilot program in the Sanish field in the first half of 2013. They also plan to re-work several existing wells in their Sanish field in 2013.

In order to process the produced gas stream from the Sanish wells, Whiting constructed and brought on-line RLGP in 2007. In December 2010, Whiting added additional equipment which brought the plant's processing capacity to 68 MMcfd. In

April 2011, they added fractionation equipment that allows production of propane and butane, which are end products that are typically sold for higher realized prices to local wholesale and retail markets. Additionally, Whiting added compression in September 2012 that brought the plant's inlet capacity to 85 MMcfd, and is currently constructing additional compression in 2013 to realize a design capacity of 97.5 MMcfd processing capability.

The increased production continues to be constrained by take away capacity for both crude and gas products. While near term demands associated with increased crude oil production can be readily addressed with the installation of tankage for temporary storage coupled with additional trucking or rail capacity to bring it to market, the associated natural gas production is typically lost to flaring until the required infrastructure is placed into service. The requisite infrastructure includes gathering systems and gas processing to refine the raw feed stock into commercial products. The function of the gas processing plant is to separate commercial grade methane (i.e.; natural gas) from NGLs such as butane, propane and ethane; and in turn prepares these products for delivery. The rapid increase in gas production from Bakken and Three Forks wells has exceeded the limited processing capacity available at existing facilities, and construction of additional processing capacity is required to meet the demand of area producers. Absent the construction of additional processing capacity, gas produced in association with oil from these wells must be flared, which is a loss of revenue to the producers, royalty owners, and the state of North Dakota in addition to environmental impacts. Gas gathering and processing is a non-discretionary service that is required for the marketing and sale of natural gas produced in association with oil from these wells.

4.2 Description of Feasible Alternative Methods of Serving the Need

A thorough analysis of all reasonable alternatives was conducted. Various factors were considered by Whiting, including engineering, economic, and environmental factors in multidisciplinary and iterative fashion. This process identified the following alternatives.

No Action Alternative: Overall regional production would continue to be constrained by gas processing capacity, resulting in increased flaring at well head and loss of natural resources. This alternative is not desirable.

New Plant Siting: The alternative to site a new plant was considered, however it was found to have greater indirect impact to area resources as each alternative site considered would require installation of additional infrastructure (e.g.; access roads, utilities, and delivery pipelines) and increased distance from Whiting's existing gas

gathering system which would deliver gas to the plant). This alternative is not desirable.

4.3 Whiting's Most Recent 10-Year Plan

Whiting's most recent 10-year plan was filed September 6, 2013 (PU-13-784).
The Project was listed in the 10 year plan as a "Planned Facility" in Section C for proposed facilities to be constructed within 5 years.

SECTION 5: LOCATION

5.1 Study Area

Whiting's Study Area includes a 1-mile-wide area surrounding the 35 acre Plot as described in Appendix B. Whiting initiated agency consultations, GIS mapping, internet based research and desktop analysis when conducting the resource inventory of the Site. These efforts were augmented with biological and cultural resource surveys of the Site.

5.2 Identify and Map Criteria

The information presented in this section was developed to demonstrate conformation with the Commission's siting criteria for Energy Conversion facilities. Whiting has conducted a thorough inventory of the Study Area and evaluated the resources that occur within the Study Area and Site sufficiently to assess the compatibility of the Plant with the state's siting criteria. The following sections identify and discuss the presence or absence of siting criteria within the Study Area or Site. Where siting criteria is identified, its location is shown on the maps in Appendix B.

5.3 Exclusion Area Inventory and Analysis

Exclusion areas are geographic areas that should be excluded from consideration when siting an energy conversion facility. The following table and text identify and discuss exclusion areas identified within the Study Area or Site.

Table 1: Exclusion Areas

Exclusion Area		Project Site	Within Study Area
Federal			
	National Parks or Memorial Parks	No	No
	Historic Sites, Districts, or Landmarks	No	No
	Natural Landmarks or Monuments[1]	No	No
	Wilderness Areas or Wildlife Areas[1]	No	No
	Wild, Scenic or Recreational Rivers[1]	No	No
	Wildlife Refuges or Grasslands[1]	No	No
State			
	Forest or Forest Management Lands[1]	No	No
	Historic Sites, Monuments, or Historical Markers	No	No
	Archaeological Sites	No	No
	Grasslands	No	No
	Wild, Scenic or Recreational Rivers	No	No
	Game Refuges or Game Management Areas[1]	No	No
	Management Areas	No	No
	Nature Preserves	No	No
County			
	Parks	No	No
	Recreation Areas	No	No
	Municipal Parks	No	No
Other			
	Parks or public lands held by other government entities.	No	No
	Prime Farmland	No	Yes
	Irrigated Farmland	No	No
	Critical habitat for protected species	No	No

[1]Pending Agency Response.

5.3.1 Federal Resource Review

Based upon a review of publicly available information, Whiting has concluded that there are no national parks, memorial parks, historic sites and landmarks, monuments, or wilderness areas within the Project Area or Site. Whiting has initiated consultations with agencies to confirm this conclusion. See Section 3 (Studies) for a comprehensive discussion of Whiting's efforts. [1]Pending Agency Response.

5.3.2 State Resource Review

Based upon a review of field surveys and publicly available information, Whiting has concluded that there are no state parks, historic sites, monuments, historical markers, archaeological sites, or nature preserves within the Study Area or Site. Whiting has initiated consultations with agencies to confirm this conclusion. See Section 3 (Studies) for a comprehensive discussion of Whiting's efforts. [1]Pending Agency Response.

5.3.3 County Resource Review

Based upon a review of publicly available information Whiting has concluded that there are no county parks, recreation areas, municipal parks, or parks owned by other subdivisions of government bodies within the Study Area or Site. Whiting has initiated consultations with agencies to confirm this conclusion. See Section 3 (Studies) for a comprehensive discussion of Whiting's efforts. [1]Pending Agency Response.

5.3.4 Prime Farmland

Whiting conducted a review of the U.S. Department of Agriculture Natural Resources Conservation Service Web Soil Survey. The table below summarizes the Prime Farmland soil rating for soils within the 1-mile Study Area. The Site consists of a maintained, gravel well pad. No natural soil horizons are present within the site.

Table 2: Prime Farmland Soils

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
C3A	Parnell silty clay loam, 0 to 1 percent slopes	Not prime farmland	20.7	2.4%
C132B	Williams-Zahl loams, 3 to 6 percent slopes	Farmland of statewide importance	266.3	31.2%
C132C	Williams-Zahl-Zahill complex, 6 to 9 percent slopes	Not prime farmland	120.8	14.2%
C135D	Zahl-Williams loams, 9 to 15 percent slopes	Not prime farmland	146.3	17.2%
C205A	Bowbells-Tonka complex, 0 to 3 percent slopes	Prime farmland if drained	27.1	3.2%
C272A	Hamerly-Tonka complex, 0 to 3 percent slopes	Not prime farmland	6.0	0.7%
C477A	Savage silty clay loam, 0 to 2 percent slopes	Farmland of statewide importance	0.8	0.1%
C501A	Korchea loam, 0 to 2 percent slopes, occasionally flooded	Farmland of statewide importance	13.5	1.6%
C665B	Noonan-Niobell-Williams loams, 0 to 6 percent slopes	Not prime farmland	82.2	9.6%
C810A	Bowdle loam,	Farmland of statewide	65.3	7.7%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
	0 to 2 percent slopes	importance		
C816B	Lehr loam, 2 to 6 percent slopes	Not prime farmland	38.5	4.5%
C825A	Divide loam, 0 to 2 percent slopes	Not prime farmland	15.5	1.8%
C870E	Wabek-Lehr-Appam complex, 9 to 25 percent slopes	Not prime farmland	43.7	5.1%
C874C	Wabek-Appam complex, 6 to 9 percent slopes	Not prime farmland	5.7	0.7%
C990F	Pits, gravel and sand, 0 to 60 percent slopes	Not prime farmland	0.3	0.0%
Totals for Area of Interest			852.6	100.0%

Source: USDA, NRCS Web Soil Survey (2013)

5.3.5 Irrigated Farmland

Whiting's investigation found no evidence of irrigation within the Study Area or Site.

5.3.6 Protected Species Resource Review

Whiting has conducted field surveys of the Site and reviewed published information and has concluded that there are no areas critical to the life stages of threatened or endangered animal or plant species within the Study Area or Site. Whiting has initiated consultations with agencies to confirm this conclusion. See Section 3 (Studies) for a comprehensive discussion of Whiting's efforts. [1]Pending Agency Response.

5.3.7 Critical Habitat for Protected Species

Based upon consultations with agencies and surveys of the Site, Whiting has confirmed the absence of critical habitat within the Study Area and Site. See Section 3 (Studies) for a comprehensive discussion of Whiting's efforts. [1]Pending Agency Response.

5.4 Avoidance Area Inventory and Analysis

Table 3

Avoidance Area		Project Site	Within Study Area
Other			
	Other Historic Resources not meeting Exclusion Areas criteria	No	No
	Areas within City Limits or Military Installation Boundaries	No	No
	Areas within Known 100-Year Floodplains	No	No
	Areas of Known Geologic Instability	No	No
	Woodlands and Wetlands	No	Yes
	Areas of Recreational Significance not categorized as Exclusion Areas	No	No
	Areas within 500 feet of an Inhabited Rural Residence	No	Yes

5.4.1 Other Historical Resources Not Meeting Exclusion Area Criteria

Whiting conducted a Class I study of the Study Area and Site, and conducted a Class III cultural resource survey of the Site; these studies confirmed the absence of historical resources. The SHPO has reviewed the associated reports, conclusions and recommendation and has concurred with study's conclusion of "No Significant Sites". See Section 3 (Studies) for a comprehensive discussion of Whiting's efforts.

5.4.2 Areas Within City Limits or Military Installation Boundaries

Whiting has confirmed that the Study Area and Site are not located within city limits or within the boundaries of military installations.

5.4.3 Areas Within Known 100-Year Floodplains

Typically flood hazards are benchmarked with Federal Emergency Management Administration's (FEMA) 100-year floodplain analysis. Unfortunately, many rural areas have not been mapped by FEMA. The Site's lowest elevation is approximately 22 feet higher than the nearest waterbody. This difference in elevation suggests the site is clear of a 100-year floodplain.

5.4.4 Areas of Known Geologic Instability

There are no known areas of geological instability within the Study Area or Site. North Dakota has not experienced an earthquake of sufficient magnitude to damage welded steel piping or structural steel in recorded history. Sink holes are known to

occur in North Dakota but are more closely related to mining activities and no evidence of mining or sink holes were identified. Finally, the potential for landslides was evaluated. Earth movement of this nature is closely associated with areas of great topographic relief, high gradient slopes, recent deposits that have yet to reach a stable angle of repose, or where underground water movement may create a slurry of rock and mud resulting in a subsidence. No such features were identified within the Site or Study Area.

5.4.5 Woodlands and Wetlands

Natural resource studies of the Site augmented GIS analysis and agency consultations when assessing wetland and woodland resources of the Study Area. Woodlands associated with waterways and property/section lines occur within the Study Area but none were found on the Site.

A desktop inventory of the Site identified no mapped wetland features within the fenced Site. The nearest wetland or waterbody feature to the Site is Crane Creek located approximately 496 feet south of the Site. The nearest mapped NWI wetland is a PEMC wetland approximately 0.25-mile southeast of the Site. A survey was conducted of the Site which confirmed the absence of wetlands or waterbody features within the Site. See Appendix D for the wetland delineation report for this Site.

5.4.6 Areas of Recreational Significance Not Categorized as Exclusion Areas

No areas of recreational significance occur within the Study Area or Site.

5.4.7 Areas within 500 Feet of Inhabited Rural Residence

Whiting has confirmed the presence of approximately 9 occupied structures located within the Study Area. These structures are comprised of temporary living quarters (approximately 8 units), a place of business (Bayou Well Service), and an undetermined number of apartments located above the business. These structures were all constructed after the plant was constructed and placed into service.

5.5 Factors to be Considered in Evaluating Applications and Designation of Sites, Corridors and Routes (Section 49-22-09, N.D.C.C.)

5.5.1 Selection Criteria

The selection criteria require a study of environmental impacts and changes in land use that may result from the siting of the proposed facility. Through this process, Whiting proposes that it has successfully avoided or minimized these effects to the maximum extent practicable, for Commission review and approval.

5.5.1.1 Agricultural Impact Assessment

Agricultural Production: The Plant will not remove any tillable land from agricultural production. This parcel represents the minimum amount of surface area necessary to develop the gas processing capacity with current design specifications while maintaining minimum spacing requirements for the equipment, and installation of necessary peripheral equipment such as a flare, power substation, roads, and continually occupied office building.

Family Farms and Ranches: The property has been operated by Whiting as the RLGP since 2007. The Site is over half of a mile from the nearest occupied farm residence. No impacts to family farms or ranches are anticipated.

Lands Suitable for Irrigation: Construction activity will not impact irrigated lands. Land that is most efficient for irrigation is relatively level and has soils that are well drained and highly permeable. The Site is a maintained, gravel pad. No above-ground irrigation systems have been identified in the Study Area.

Surface Drainage: The existing surface drainage pattern at the Site is to the southeast toward Crane Creek. Whiting has studied the site with respect to stormwater run-off management and has determined that the most effective means of controlling stormwater flows will be to implement certain engineered structural control measures to manage run-off from the plant in combination with a passive system that utilizes the natural drainage of the undeveloped portions of the Site. These open green spaces will serve as natural filtration of sediments and shall promote onsite infiltration.

Ground Water: The aquifers that underlay North Dakota are typically associated with two types of geologic formations, specifically bedrock and glacial drift. Bedrock aquifers in the area are known to occur from 3,000 to 5,000 feet below the surface while glacial drift aquifers are known to occur at depths of from a few feet to up to 500 feet below the surface. Ground excavation associated with the Project will generally be limited to depths no greater than 8 feet, as such it is unlikely that the Project would have significant or permanent impact on groundwater resources.

Agricultural Quality of the Cropland: No agricultural land will be acquired for the Plant. No land will be permanently removed from agricultural production. No other impact to agricultural lands is anticipated.

Impact Upon the Availability and Adequacy of Local Public Services: The potential impacts to local public services including law enforcement, fire department, health

care, public schools and recreational facilities are anticipated to be temporary in duration and minimal in their overall effect to existing programs and systems.
Construction activities are anticipated to occur over an 18 to 24 month period. During this period there will be an influx of employees ranging from laborers, skilled trades, technicians, engineering and environmental professionals. The work force will typically engage 50 individuals, with periods where the workforce will increase to levels of up to 100 individuals for a period of up to 6 months.

Area resources may experience increased demand on services with the addition of construction workers temporarily residing in the area. The peak demands will likely occur in 2014. The most noticeable impact may be due to an increase in vehicle traffic associated with the plant.

Prior to construction, Whiting will coordinate with local health care providers and emergency responders to discuss emergency response coordination.

5.5.1.2 The Impacts Upon

Local Institutions: Due to its proximity to the project site, New Town may see the greatest impact from the Project. These impacts from facility construction will be temporary as the majority of the construction will be completed by 2014. Once operational the Plant will continue to utilize their existing employees to operate the facility. No new employees will be required for the Project. Generally, the impacts will be beneficial to the local economy during construction due to the addition of revenues from outside of the community being spent on goods and services locally.

Noise-Sensitive Land Uses: Whiting has identified a total of nine (9) occupied structures within the Study Area. These structures are comprised of eight (8) temporary housing units and one (1) combination place of business with housing (apartments). All of these structures are one-third mile south of the Site. All of these structures were constructed after the Plant was constructed and placed into service.

The Project has been sited approximately 7.5 miles from New Town in a rural setting, effectively isolating the Project from the majority of sensitive receptors. Local residents may experience additional motor vehicle volumes on area roadways, but the noise associated with vehicles will be similar to existing background levels and occur largely during normal business hours.

Rural Residences and Businesses: The Project is located approximately 7.5 miles from New Town. Residents may experience additional traffic congestion and an increase in commerce in response to the influx of temporary workers purchasing

goods and services. The Plant will likely benefit the local economy for both the near and long term.

Aquifers: Water demands during and after construction are anticipated to be minimal.

Human Health and Safety: Whiting promotes a safe and healthy workplace during construction and operations of all its assets. Whiting implements a corporate policy that meets or exceeds federal and state laws, rules and regulations applicable to health, safety, and the environment. Their policy is enforced and adhered to by all regular and contract employees. Whiting governs operations and construction activities with various safe work procedures designed to protect property and personnel and maintaining regulatory compliance.

Animal Health and Safety: The wildlife currently inhabiting the Site are common and are generally mobile. The local wildlife inhabitants will be displaced by the Project without a measurable impact to the viability of these populations. No species of special concern are anticipated to experience direct impacts due to construction or operation of the Plant.

Plant Life: The Project will be conducted entirely within an existing fenced gas plant. No loss of natural vegetation will occur as a result of the Project. No species of special concern will be impacted by the Project.

Temporary and Permanent Housing: The region has experienced increased demand for permanent and temporary housing as the result of the continued expansion of resource production. The area has witnessed this increased activity since the early 2000's and as a result has steadily increased lodging resources in response. The temporary work force is expected to be well aware of the situation and willing to accept non-traditional lodging opportunities such as work camps if necessary.

Temporary and Permanent Skilled and Unskilled Labor: Construction of the Project will require a work force of approximately 50 to 100 temporary employees. The construction employees will be comprised of both skilled and unskilled personnel. Skilled labor will include craft workers such as operating engineers, iron workers, welders, electricians, carpenters and boilermakers. The unskilled workforce will be comprised of common laborers who work closely with the skilled trades.

Once the Project is fully in-service, it will utilize work force currently employed at the plant. These personnel will be responsible for day-to-day operations, maintenance, and support of local gathering assets that supply the Plant.

5.5.2 Cumulative Effects of the Location of the Facility in Relation to Existing and Planned and Facilities and Other Industrial Development

Whiting is not aware of any new planned facilities or industrial developments at the Site. The introduction of additional gas processing capacity may expose existing demand that may result in development of additional gathering capacity. Also a result of new processing capacity, there may be development of additional take-away capacity to bring the product to market at some point in the future.

5.6 Policy Criteria

The Commission may give preference to an applicant that will maximize benefits that result from the adoption of the following policies and practices, and in proper case may require the adoption of such policies and practices. The Commission may also give preference to an applicant that will maximize interstate benefits.

5.6.1 Policies and Commitments to Limit Environmental Impact

Whiting is dedicated to protecting employee health and the environment. We do this by conducting our operations in compliance with applicable laws and regulations; by fostering a work culture that rewards and holds employees and contractors accountable for working safely; by reducing discharges and waste, by minimizing land disturbance; and by encouraging the efficient use of natural resources.
Our guiding principles are:

- Compliance. We comply with health, safety, and environmental laws and regulations, and internal standards by identifying the applicable requirements and putting practices in place to meet them.
- Pollution Prevention. We manage our business with the goal of preventing pollution and using land and materials effectively. We take proactive steps to prevent spills, implement good housekeeping practices, and conserve resources by continually monitoring and reducing waste streams and emissions.
- Safe Work Environment. We maintain facilities, provide training, and conduct operations to protect our employees, our contractors and the public. We ensure that our employees and contractors are aware of health, safety and environmental issues through training and communication.
- Continual Improvement. We continually improve our health, safety, and environmental programs by monitoring and evaluating our safety and environmental performance.

- Communications. We communicate our health, safety, and environmental performance expectations with our employees, contractors, and the public to ensure that our decision-making process addresses these issues.

Whiting understands that strong health, safety, and environmental principles, properly integrated into our management processes, and day to day practices, greatly contributes to our business success..

5.6.2 Recycling of the Conversion Byproducts and Effluents

Not applicable to this type of project.

5.6.3 Energy Conservation Through Location, Process and Design

The siting of the Plant in close proximity to wellhead and gathering systems reduces emissions associated with shipping raw feed gas over greater distances. Both Gas/Gas and Gas/Liquid exchangers are used to minimize energy input required to cool down the gas to the required dew point. Both of these exchangers are designed with less than 10 degrees Fahrenheit approach temperatures, which help to minimize the load required on the refrigeration compression. Additionally, an economizer is used on the refrigeration portion of the plant to boost plant efficiency.

5.6.4 Training and Utilization of Available Labor in This State for the General and Specialized Skills Required

Gas plant construction is a specialized niche construction market and the labor force needed to build the Plant will be primarily comprised of a non-local workforce. The primary contractor will be a non-local contractor, supplying specialized skilled labor. Whiting will draw upon the local labor force to supply general laborers. The workforce is anticipated to reach a peak of approximately 100 personnel of which up to 10 percent could be drawn upon locally.

5.6.5 Use of a Primary Energy Source or Raw Material Located Within the State

The raw feed gas supplying the proposed Plant will be produced and processed entirely in State. The Plant products will be shipped to delivery points in State and transported out of state.

5.6.6 Nonrelocation of Residents

No residences shall be displaced or require relocation due to the Project.

5.6.7 The Dedication of an Area Adjacent to the Facility to Land Uses Such As Recreation, Agriculture, or Wildlife Management

Whiting does not own property adjacent to the proposed Project suitable for recreation, agricultural, or wildlife management purposes. The current land use of properties

adjacent to the Project is agricultural/range land (see aerial photograph in Appendix B).

5.6.8 Economies of Construction and Operation

Whiting has designed the Plant to take advantage of the Site's proximity to existing electrical supply and gathering system piping for its location. The Plant will use an existing gathering line system to deliver raw feed stock to the Plant from the gathering fields and generate new delivery points for processed natural gas, NGLs and its constituents. The Plant's location and design are clear examples of creating an economy of scale Project concept, achieving additional production capacity in the most minimally intrusive and most efficient way possible, in terms of new infrastructure development.

5.6.9 Secondary Uses of Appropriate Associated Facilities for Recreation and the Enhancement of Wildlife

Construction of the Plant will result in the development of an industrial facility and a setting not typically suitable for recreational or wildlife application.

5.6.10 Use of Citizen Coordinating Committees

Whiting has established and maintained a good relationship with the local residents through its presence operating gathering systems in the area. Through these relationships Whiting has maintained several grass roots communication channels to inform local residents regarding the developments associated with the Plant.

5.6.11 A Commitment of a Portion of the Transmitted Product for Use in This State

The raw feed gas supplying the proposed Plant will be supplied and processed entirely in state. The products of the Plant will be transported to delivery or transfer points located both in State and out of state.

5.6.12 Labor Relations

Whiting does not anticipate encountering any adverse labor relations on this Project. The labor market in the Project area is supportive of the oil and gas industry.

5.6.13 The Coordination of Facilities

Whiting is actively pursuing natural gas gathering and processing development projects in northwestern North Dakota. Whiting will coordinate the construction of the Project with its other gas gathering construction projects. Coordinating construction activities will result in greater efficiencies by using much of the same labor pool and often the same construction equipment.

5.6.14 Monitoring of Impacts

Whiting will coordinate with its primary contractor, the oversight responsibilities for construction activities at the Site. Environmental responsibilities shall be coordinated in the same manner.

5.6.15 Problems Raised by Federal Agencies, Other State Agencies, and Local Entities

Whiting has initiated consultations with several federal, state, and local authorities who have environmental oversight authority. The purpose of these consultations is the identification of potential natural resource issues related to the Plant. Responding agencies have not raised any concerns. Whiting will respond to any concerns raised by agencies with pending responses.

SECTION 6: MITIGATIVE MEASURES

Whiting's commitment to minimize environmental impacts is a key mitigation element. The full utilization of an existing facility through the redesign of existing equipment and the addition of key pieces of equipment all within an existing developed facility will maximize efficiencies while minimizing impacts to the environment. This combination of actions effectively mitigates the impacts of the Plant.

SECTION 7: LIST OF PREPARERS

Nicole Tebow
Pipeline Compliance Specialist
Whiting Oil and Gas Corporation, 1700 Broadway, Suite 2300 Denver, CO 80290

B.A. Environmental Policy, University of Colorado – Boulder. Ms. Tebow has 13 years of experience in oil and gas environmental and safety compliance. She has worked specifically with Department of Transportation pipeline regulations for 7 years and is in charge of pipeline compliance for Whiting. She also has experience with air regulations and permitting, water and soil remediation, and Phase I site assessments. Ms. Tebow worked as a consultant prior to coming to Whiting.

Mike Solomon
Facilities Engineering Supervisor
Whiting Oil and Gas Corporation, 1700 Broadway, Suite 2300 Denver, CO 80290

B.S. Chemical Engineering, Ohio University. Mr. Solomon has 10 years of experience in oil and gas working in both upstream and downstream. He has worked specifically with Upstream/Midstream Operations and Projects for 4 years and is in charge of engineering for ND midstream facilities. Mr. Solomon worked as an operations engineer in refining prior to coming to Whiting.

William McCarthy, C.W.B.
Senior Environmental Compliance Analyst
E3 Environmental, LLC, 871 Jefferson Ave., St. Paul, MN 55102

M.S. Wildlife Biology, University of Minnesota – Twin Cities; B.S. Wildlife Biology, Michigan State University. Mr. McCarthy is an environmental compliance analyst with 17 years of environmental consulting experience working with various energy assets and regulatory agencies. As a compliance analyst, he has managed the environmental requirements for facility siting, pipeline routing, federal licensing, and various federal, state and local permits. Mr. McCarthy is a certified wildlife biologist and in this role conducts and coordinates field studies, agency consolations, mitigation, and avoidance plans.

Jennifer Kamm
Environmental Consultant, Wetland Scientist
E3 Environmental, LLC, 871 Jefferson Avenue, St. Paul, MN 55102

B.S. Natural Resources and Environmental Studies/Minor in Forestry, University of Minnesota – Twin Cities. Ms. Kamm has also obtained a Professional Certification in her area of technical expertise, Wetland Delineation. Ms. Kamm has 10 years of professional experience involving Environmental Assessments, Environmental Impact Statements, Certificate of Site Compatibility Applications, Environmental Resource Permitting, Land Use Plans, Wildlife and Endangered Species Assessments, Wetland Delineations, Permit Applications, and Mitigation Plans.

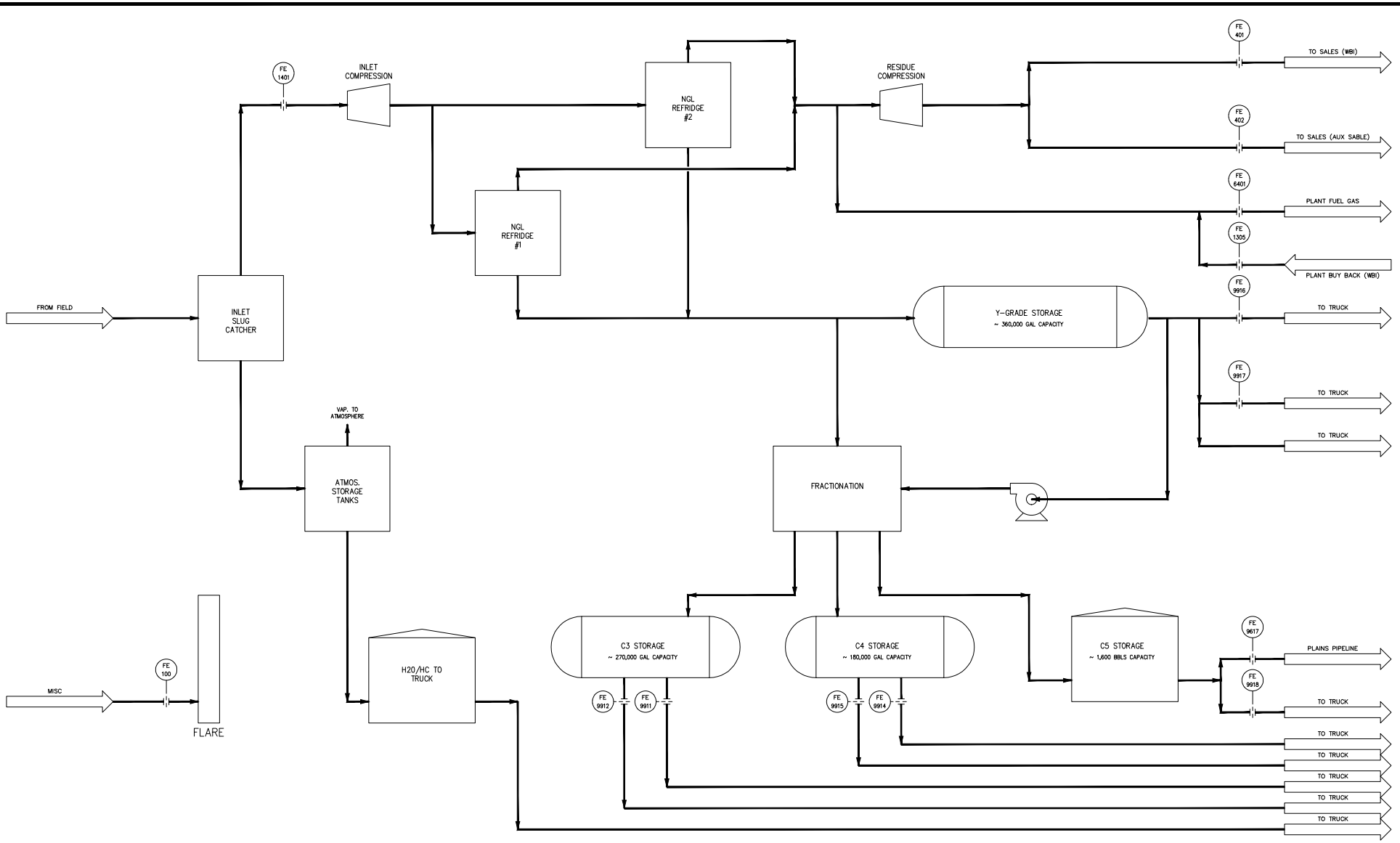
Lindsey Danielson
GIS Analyst
E3 Environmental, LLC, 871 Jefferson Avenue, St. Paul, MN 55102

Graduate Certificate in Geographic Information Science, St. Mary's University of Minnesota; B.S. Geoscience: Geology, Winona State University. Ms. Danielson is also working toward a M.S. in Geographic Information Science at St. Mary's University of Minnesota with concentrations in Homeland Security/Emergency Management as well as Natural Resource Management. Ms. Danielson has almost 3 years of professional experience creating and editing data from various sources and formats. She excels at advanced cartography, data management, and spatial analysis.

SECTION 8: ACRONYMS AND ABBREVIATIONS

Commission or PSC	North Dakota Public Service Commission
E3 Environmental	E3 Environmental, LLC
FEMA	Federal Emergency Management Administration
FWS	U.S. Fish and Wildlife Service
GFD	North Dakota Game and Fish Department
GIS	Geographic Information System
MBbl	thousand barrels
MMBOE	million barrels of oil equivalent
MMcfd	million cubic feet per day
MMSCFD	million standard cubic feet per day
ND PDES	North Dakota Pollution Discharge Elimination System
NDDoH	North Dakota Department of Health
NGL	natural gas liquids
NWI	National Wetland Inventory
PEMC	Palustrine Emergent Seasonally Flooded
PRD	North Dakota Parks and Recreation Department
Project	Robinson Lake Gas Plant Expansion Project
RLGP or Plant	Robinson Lake Gas Plant
SHPO	North Dakota State Historic Preservation Office
SWCA	SWCA Environmental Consultants
SWPPP	Storm Water Pollution Prevention Plan
Whiting	Whiting Oil and Gas Corporation

Appendix A
Engineering Documents



GWD
GWDDESIGN.NET
621 17th St, Denver, CO | 303-861-8888
EFFICIENCY THROUGH ENGINEERING & DESIGN

REFERENCE DRAWINGS	No	REVISIONS	BY	CHKD	PM	DATE
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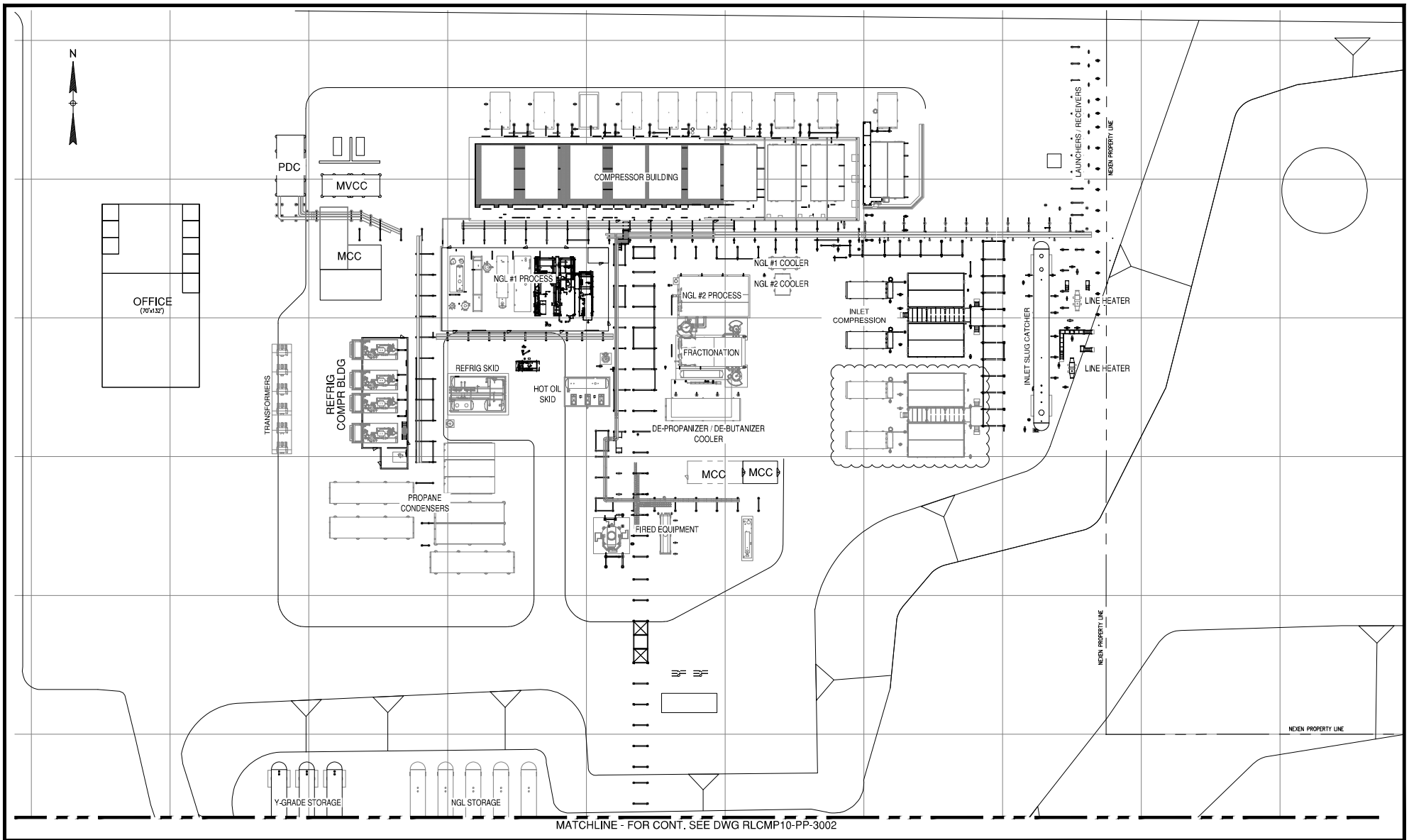
	1					
	2					
	3					
	4					
	5					
	6					
	A	ISSUED FOR REVIEW	JAF			11/16/11

Whiting Petroleum Corporation

MOUNTRAIL COUNTY, NORTH DAKOTA
ROBINSON LAKE PLANT
BLOCK FLOW DIAGRAM

PROJ. NUMBER	DRAWING NUMBER	SCALE	REVISION
	RL-BFD-1900	NONE	A



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SWDDESIGN.NET
621 17th St, Denver, CO | 303-831-8999
EFFICIENCY THROUGH ENGINEERING & DESIGN

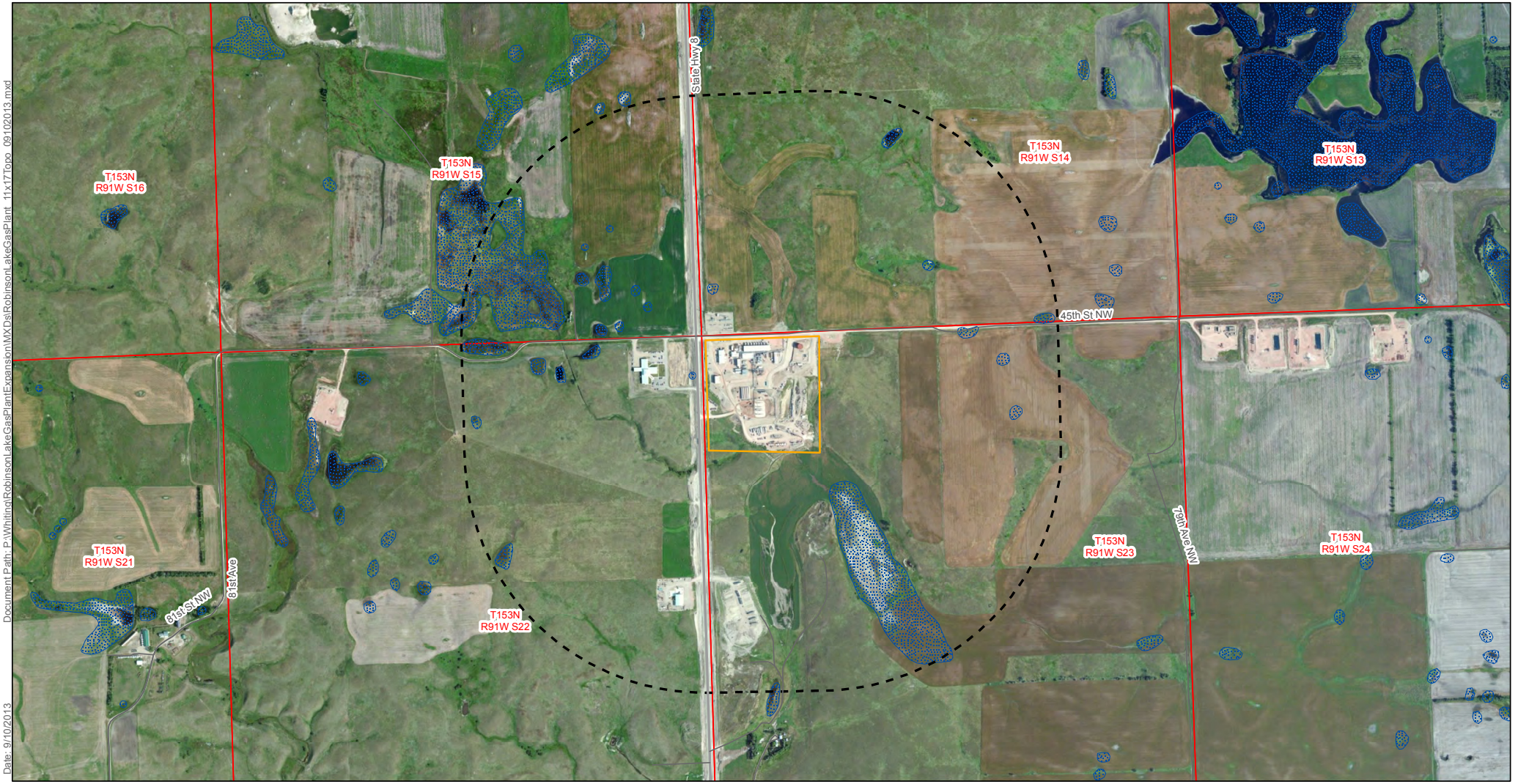
REFERENCE DRAWINGS	No	REVISIONS	BY	CHKD	PM	DATE
	A	ISSUED FOR REFERENCE	CDH			9/6/13

Whiting Petroleum Corporation

Mountrail County, North Dakota
ROBINSON LAKE PLANT
ENLARGED PLOT PLAN
2014 EXPANSION

FILE NUMBER	DRAWING NUMBER	SCALE	REVISION
RL13EXP-PP-3000	RL13EXP-PP-3001B	1"=30'	A

Appendix B
Exclusion & Avoidance Maps



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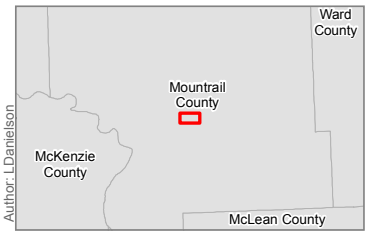
Date: 9/10/2013

Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

Enhancing Execution with Experience

0 500 1,000 2,000 Feet

1:12,000

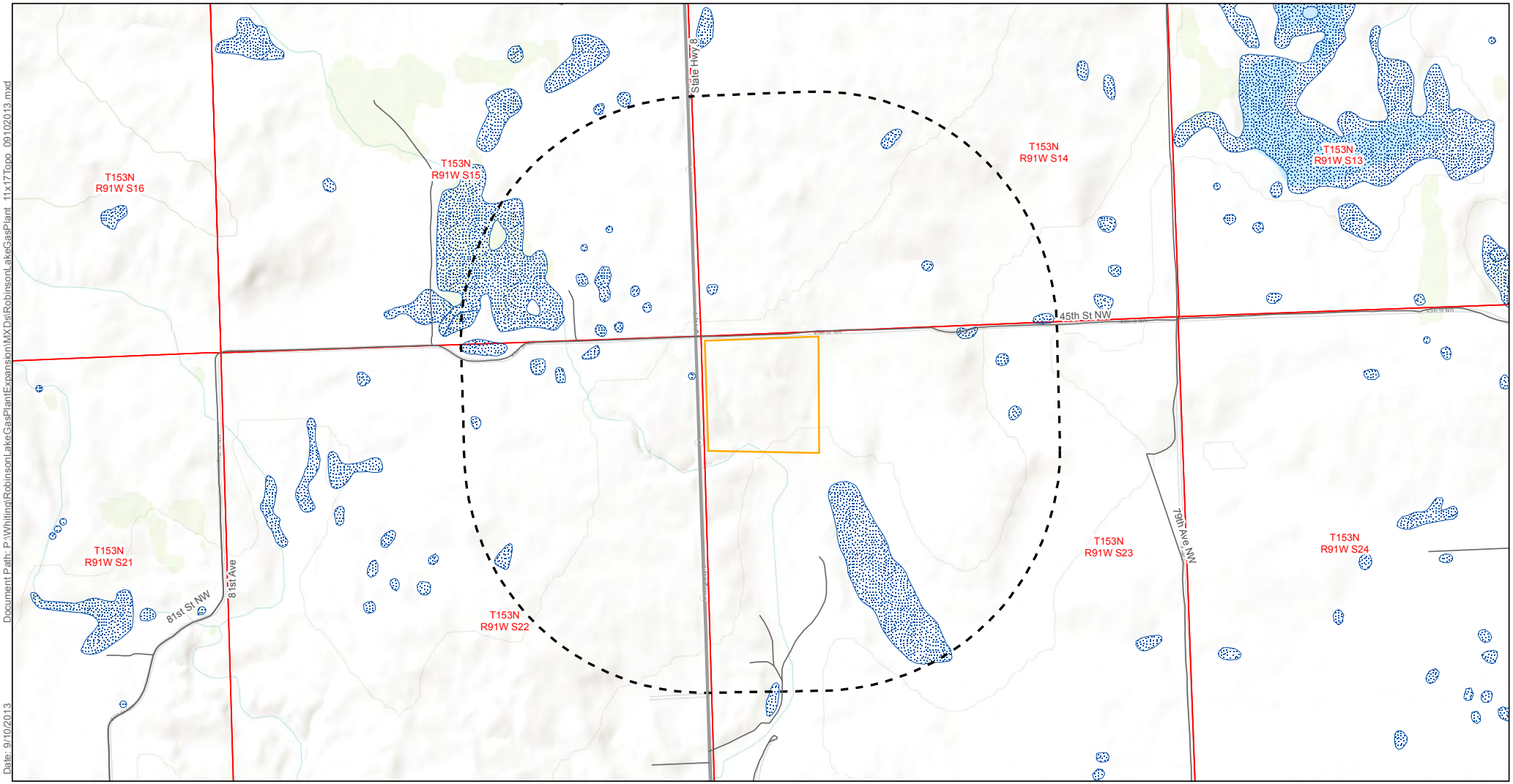
Map not to scale, for environmental review purposes only.

Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Aerial Location Map

Mountrail County, North Dakota



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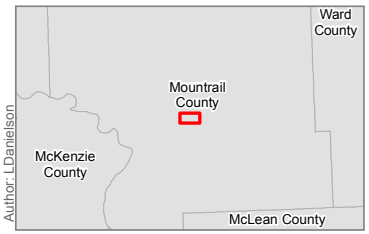
Date: 9/10/2013

Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

Enhancing Execution with Experience

0 500 1,000 2,000 Feet

1:12,000

Map not to scale, for environmental review purposes only.

Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Topo Location Map

Mountrail County, North Dakota

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Date: 10/8/2013

Author: LDanielson

Robinson Lake Gas Plant

Study Area

Occupied Structure 500ft Buffer

Enhancing Execution with Experience

WHITING

0 455 910 1,820 Feet

1:18,000

Whiting Petroleum

Robinson Lake Natural Gas Plant Expansion

Occupied Structures Analysis

Mountrail County, ND

Appendix C
Consultations

871 West Jefferson Avenue
St Paul, MN 55102

September 6, 2013

Mr. Jeffrey Towner, Field Supervisor
U.S. Fish and Wildlife Service
North Dakota Field Office
3425 Miriam Avenue
Bismarck, ND 58501-7926

RE: Whiting Oil and Gas Corporation – Robinson Lake Gas Plant Expansion
Federally Listed Species, USFWS Managed Lands, and Migratory Bird Consultation

Whiting Oil and Gas Corporation (Whiting) is considering expansion of its existing Robinson Lake Gas Plant. Currently the project under consideration would be constructed during the 4th quarter of 2013 and 1st quarter of 2014 and would require approximately 7 months to complete. All construction would take place within the existing Robinson Lake Gas Plant facility. The purpose of the expansion is to increase the plant capacity from 90MMSCFD to 110MMSCFD.

The Robinson Lake Gas Plant is located in the NW 1/4 of Section 23, Township 153N, and Range 91W in Mountrail County, North Dakota. A topographic map and aerial photograph indicating the project location are attached.

The purpose of this request is to compile U.S. Fish and Wildlife Service's (USFWS) comments on environmental topics that are relevant to the North Dakota Public Service Commission's (PSC) siting requirements for Energy Conversion facilities. On September 4, 2013, E3 conducted a web-based consultation using USFWS's IPaC system. This request has been prepared to augment that effort and facilitate a thorough project review.

Federally Listed Species Analysis:

The results of the search on September 4, 2013 found the following:

Whooping crane (*Grus americana*) – Endangered
Piping plover (*Charadrius melodus*) – Threatened
Least tern (*Sternula antillarum*) – Endangered
Pallid sturgeon (*Scaphirhynchus albus*) – Endangered
Gray wolf (*Canis lupus*) – Endangered
Dakota skipper (*Hesperia dacotae*) – Candidate
Sprague's pipit (*Anthus spagueii*) - Candidate

E3 has reviewed the available data describing the life history, critical habitat, and conservation measures associated with each species to evaluate the potential

effects of the project on these resources. The results of this analysis are as follows:

Whooping crane: The whooping crane is a large bodied marsh species that breeds primarily in Canada and winters in the Gulf of Mexico. This species has been closely studied and monitored in recent years due to its small population. North Dakota provides migratory habitat for the species, providing roosting and feeding opportunities during migration. This species prefers larger wetland complexes for roosting habitat, typically using adjacent uplands for foraging opportunities. The project under consideration will not result in a loss of crane habitat. Gas plant construction involves temporary impacts, with a post-construction restoration standard of restoring disturbed areas to their original pre-construction condition. Potential impacts are anticipated to be limited to the time period during active construction should it coincide with the spring migration period. Spring migration by the Aransas/Wood Buffalo population from the Texas Gulf Coast begins between the end of March and mid-April, with the last birds generally leaving Texas by the first of May. Experienced breeders are among the first to arrive in Canadian nesting areas in late April, with the rest of the birds arriving throughout the following 6-8 weeks.

Project precautionary measures would be implemented if a whooping crane is sighted in or near the project area. Whiting would voluntarily suspend all heavy equipment operation activities and notify the USFWS should a whooping crane be spotted within 0.5 mile of the project area. Heavy equipment activities would resume upon the departure of the individual(s). The proposed project will not result in a loss of crane habitat; construction activities would present a fairly prominent feature to be avoided relative to its surrounding landscape.

Piping plover: The piping plover is associated with shorelines along small alkaline lakes, large reservoir beaches, and river islands and adjacent sand pits. Breeding birds select wide beaches with highly clumped vegetation covering less than 25% of the area. Current breeding range on the Northern Great Plains extends south along major prairie rivers including the Yellowstone and Missouri, and in alkali wetlands including those in northeastern Montana and North Dakota. The proposed project will not result in a loss of Piping plover habitat, as it is not located within/adjacent to preferred habitat.

Least tern: The interior population(s) of the least tern has historically been associated with large river systems for breeding and migratory habitats. Breeding birds are known to breed in colonies, utilizing sandbar habitat common to larger rivers. The Missouri River is known to host remnant breeding populations of terns, which is greater than 6.5 miles from the project site. The proposed project will not result in a loss of Least tern habitat, as it is not located within/adjacent to preferred habitat

Pallid sturgeon: The pallid sturgeon preferred habitat includes the benthic environment associated with swift waters of large turbid, free-flowing rivers with braided channels, dynamic flow patterns, periodic flooding of terrestrial habitats, and requiring extensive micro habitat diversity. The species inhabits the Missouri and Mississippi Rivers from Montana to Louisiana. The proposed project will not result in a loss of Pallid sturgeon habitat, as it is not located within/adjacent to preferred habitat.

Gray wolf: The gray wolf is a large carnivore that through conservation measures has experienced strong population recovery, particularly in the Great Lakes states of the upper Midwest. As populations rebound, individuals may break from packs to explore opportunities to establish packs in unoccupied territory. Roaming individuals can cover great distances without establishing viable breeding populations in previously unoccupied habitat(s). This species is not tolerant of human disturbance and will tend to avoid interaction with humans. The activities associated with construction and later plant operations would likely serve as a deterrent to this species. Therefore, this project will have no effect on the species.

Based upon this analysis it is concluded that the proposed project will not result in the taking of or adverse impact to these listed species. Species that USFWS has listed as "candidate" or populations identified as "experimental" are not yet considered threatened or endangered and were not included in this study. ORM request your comments regarding this analysis.

USFWS Managed Lands:

Conservation programs such as Waterfowl Production Areas and wetland and grassland easements represent an important tool used by USFWS to identify and manage high quality wildlife habitat. A review of public records failed to identify any of these USFWS managed lands in the project study area. Whiting requests confirmation regarding the presence or absence of USFWS managed lands within the proposed study area.

Migratory Bird Consultation:

USFWS administers various wildlife related mandates of national concern including the Migratory Bird Treaty Act (MBTA). Whiting understands that unlike the Endangered Species Act, the MBTA has no provisions for the allowance of a take and therefore compliance may best be achieved by avoiding or minimizing the potential to interact with migratory species during the active breeding season. Whiting also understands that in North Dakota, the breeding season is typically defined as occurring annually from February 1 through July 15.

In recognition of these facts, Whiting is considering construction during the 4th quarter of 2013 and 1st quarter of 2014 and maintain an active construction site through plan commissioning and final restoration which is anticipated to occur

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approximately 7 months later. The proposed project schedule would take place during the 2014 breeding season. However the expansion will take place on the existing Robinson Lake Gas Plant. Migrants returning to this area have already encountered an active site which serves as a deterrent to breeding birds. Whiting seeks confirmation that the proposed measures adequately avoid and mitigate potential impacts to migratory birds.

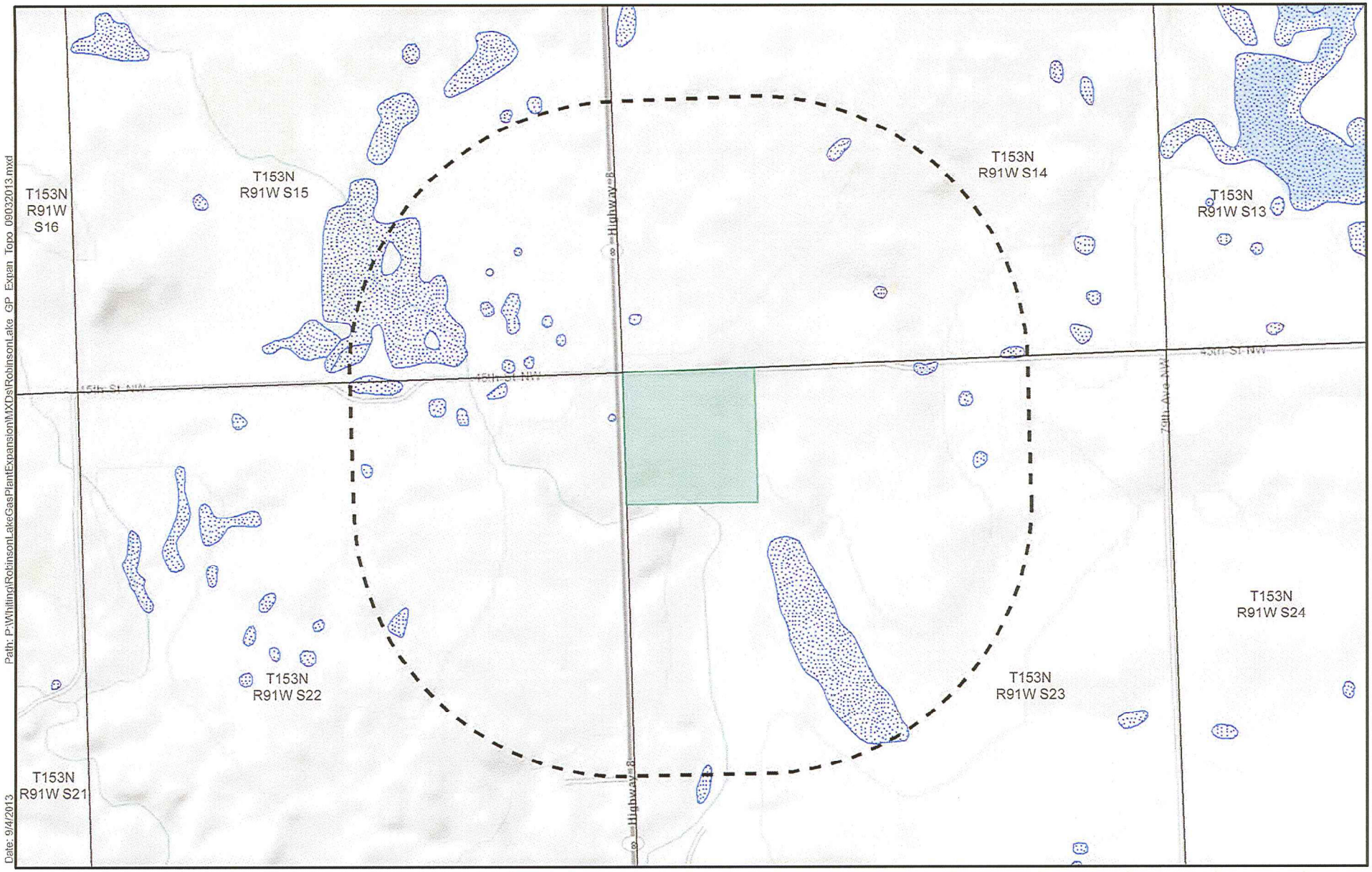
E3 Environmental, LLC has been retained by Whiting to provide environmental consulting support for this project. Should you have any questions or require additional information, please contact me at 651.282.0650 or wmcarthy@go2e3.com.

Sincerely,

William F. McCarthy
Project Manager
E3 Environmental, LLC

Enclosures: Project map – USGS topographic map
Project aerial photograph

cc: E3 Project Files

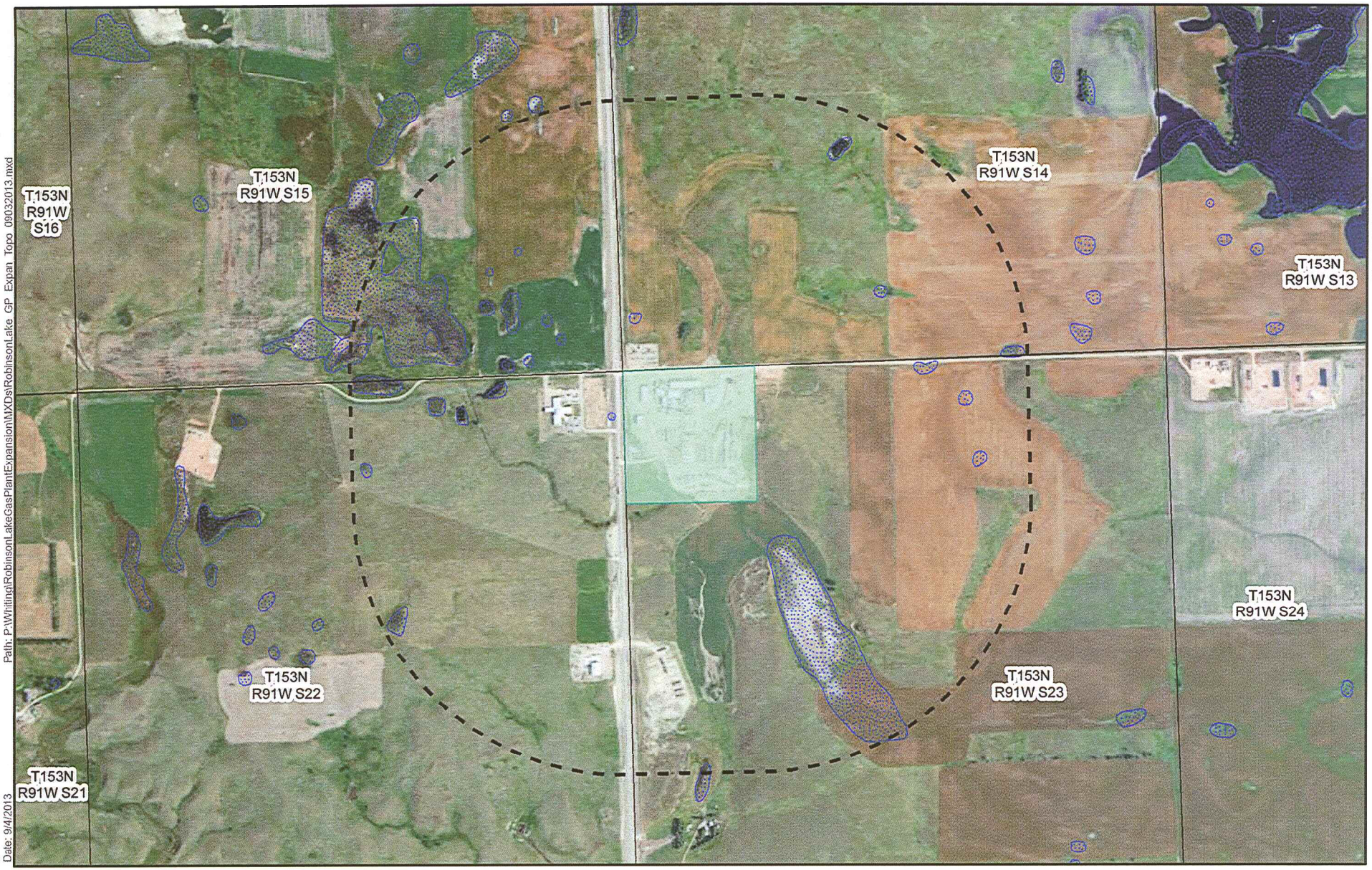


Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota



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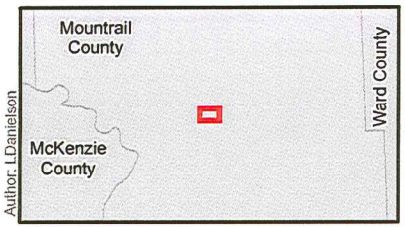
Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

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0 380 760 1,520 Feet

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Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota

871 Jefferson Avenue
St Paul, MN 55102

September 12, 2013

Mr. Greg Link, Division Chief
Conservation and Communication Division
North Dakota Game and Fish Department
100 N. Bismarck Expressway
Bismarck, ND 58501-5095

RE: Whiting Oil and Gas Corporation – Robinson Lake Gas Plant Expansion
State Conservation Priority Species Consultation, State Plots Land Review.

Whiting Oil and Gas Corporation (Whiting) is considering expansion of its existing Robinson Lake Gas Plant. Site preparation and associated plant activities for the project under consideration would be initiated during the 4th quarter of 2013 and 1st quarter of 2014, requiring approximately 7 months to complete. All construction would take place within the existing Robinson Lake Gas Plant facility. The purpose of the expansion is to increase the plant capacity from 90MMSCFD to 110MMSCFD.

The Robinson Lake Gas Plant is located in the NW 1/4 of Section 23, Township 153N, and Range 91W in Mountrail County, North Dakota. A topographic map and aerial photograph indicating the project location are attached.

The purpose of this correspondence is twofold: to request a review of the area on which the project under consideration would take place for presence or absence of State Conservation Priority Species; and to request confirmation of the presence or absence of North Dakota Game and Fish Department PLOTS Lands within the proposed development (see attached).

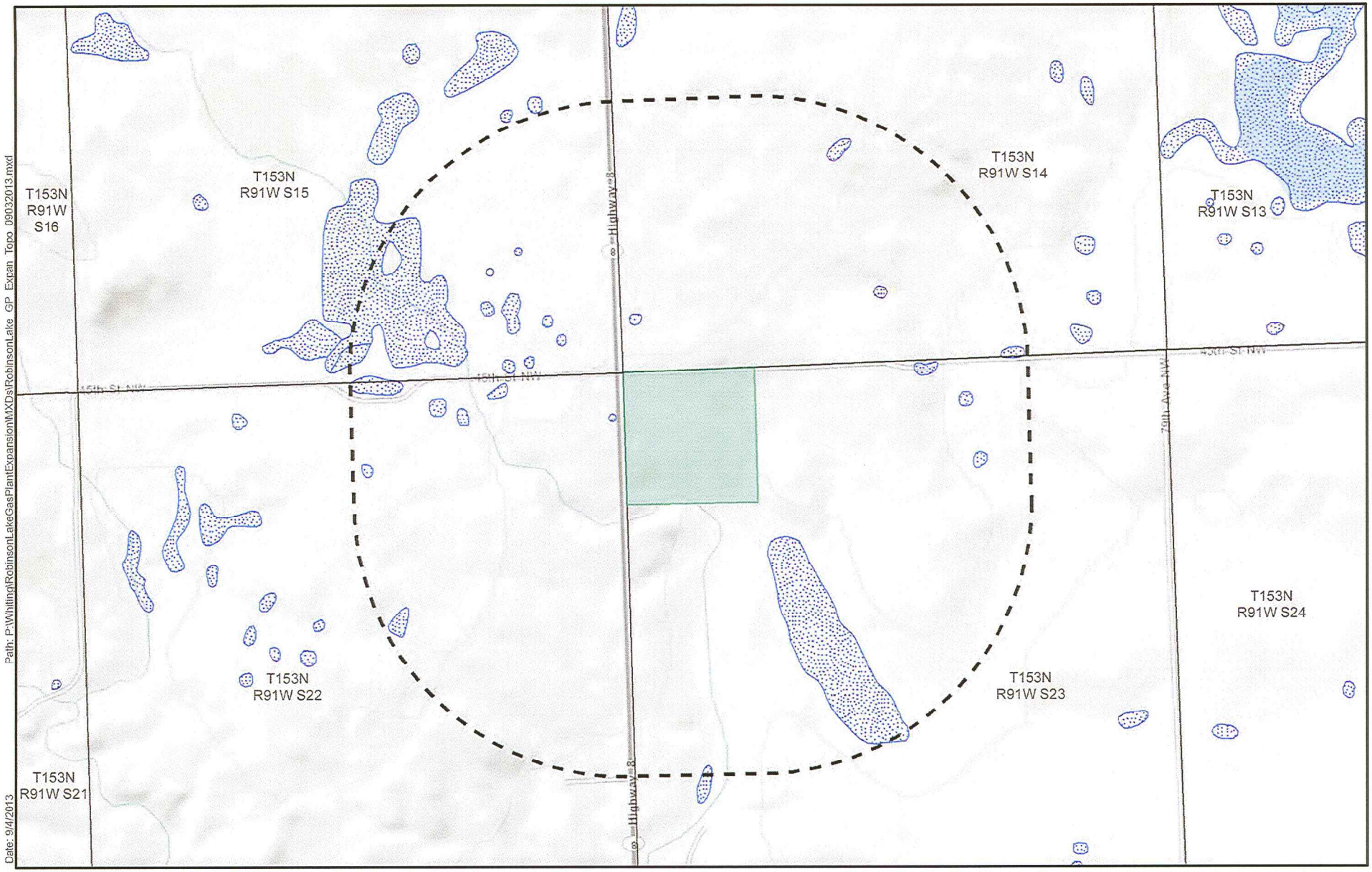
E3 Environmental, LLC has been retained by Whiting to provide environmental consulting support for this project. Should you have any questions or require additional information, please contact me at 651.282.0650 or wmcarthy@go2e3.com

Sincerely,

William F. McCarthy, CWB
Project Manager
E3 Environmental, LLC

Enclosures: Project map – USGS topographic map
Project aerial photograph

cc: Nicole Tebow, Whiting
E3 Project Files

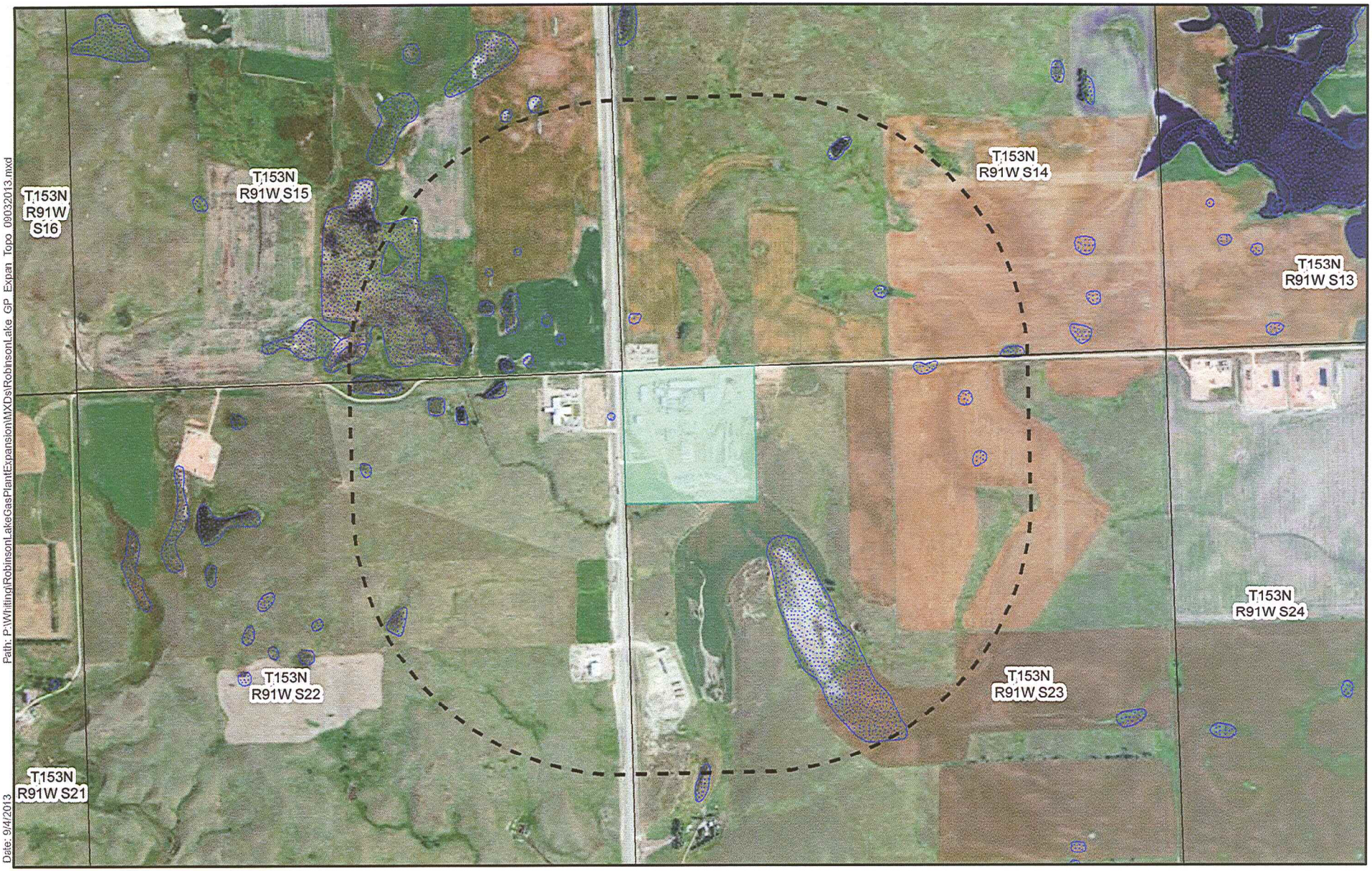


Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota



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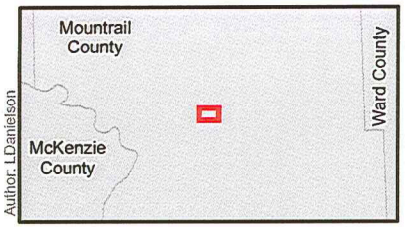
Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

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0 380 760 1,520 Feet

1:15,000

Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota

871 Jefferson Avenue
St Paul, MN 55102

September 12, 2013

Kathy Duttenhefner
North Dakota Parks and Recreation
1600 East Century Avenue, Suite 3
Bismarck, ND 58503-0649

RE: Whiting Oil and Gas Corporation – Robinson Lake Gas Plant Expansion
Natural Heritage Inventory Review Request

Dear Ms. Duttenhefner,

Whiting Oil and Gas Corporation (Whiting) is considering expansion of its existing Robinson Lake Gas Plant. Site preparation and associated plant activities for the project under consideration would be initiated during the 4th quarter of 2013 and 1st quarter of 2014, requiring approximately 7 months to complete. All construction would take place within the existing Robinson Lake Gas Plant facility. The purpose of the expansion is to increase the plant capacity from 90MMSCFD to 110MMSCFD.

The Robinson Lake Gas Plant is located in the NW 1/4 of Section 23, Township 153N, and Range 91W in Mountrail County, North Dakota. A topographic map and aerial photograph indicating the project location are attached.

The purpose of this request is to compile the North Dakota Parks and Recreation Department's (Department) comments on environmental topics that are relevant to the North Dakota Public Service Commission's (PSC) siting requirements for Energy Conversion facilities. It is our understanding that the Department administers the following state programs:

- State Park Lands
- Land and Water Conservation Fund
- Natural Heritage Inventory

We request a review of the area the project under consideration would take place (see attached maps) for the presence or absence of any lands, projects, and sensitive species that fall under the purview of these programs.

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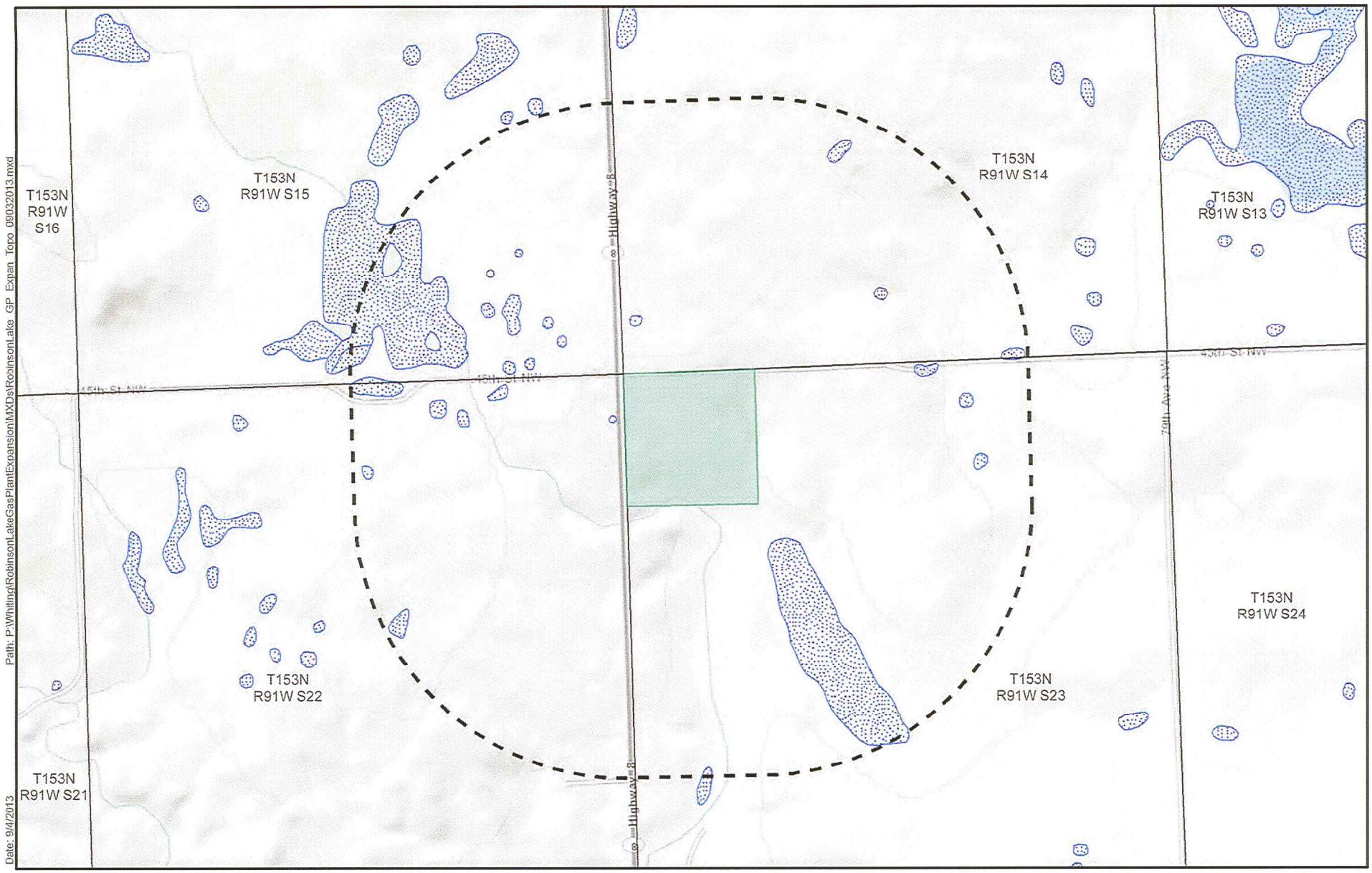
E3 Environmental, LLC has been retained by Whiting to provide environmental consulting support for this project. Should you have any questions or require additional information, please contact me at 651.282.0650 or wmcarthy@go2e3.com.

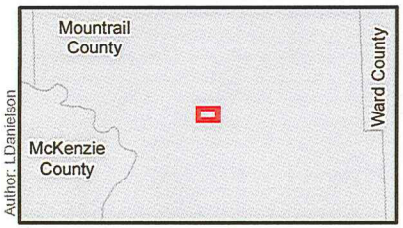
Sincerely,

William F. McCarthy, CWB
Project Manager
E3 Environmental, LLC

Enclosures: Project map USGS topographic map
Project aerial photograph

cc: Nicole Tebow, Whiting
E3 Project Files





Robinson Lake Gas Plant

Study Area

NWI Wetland

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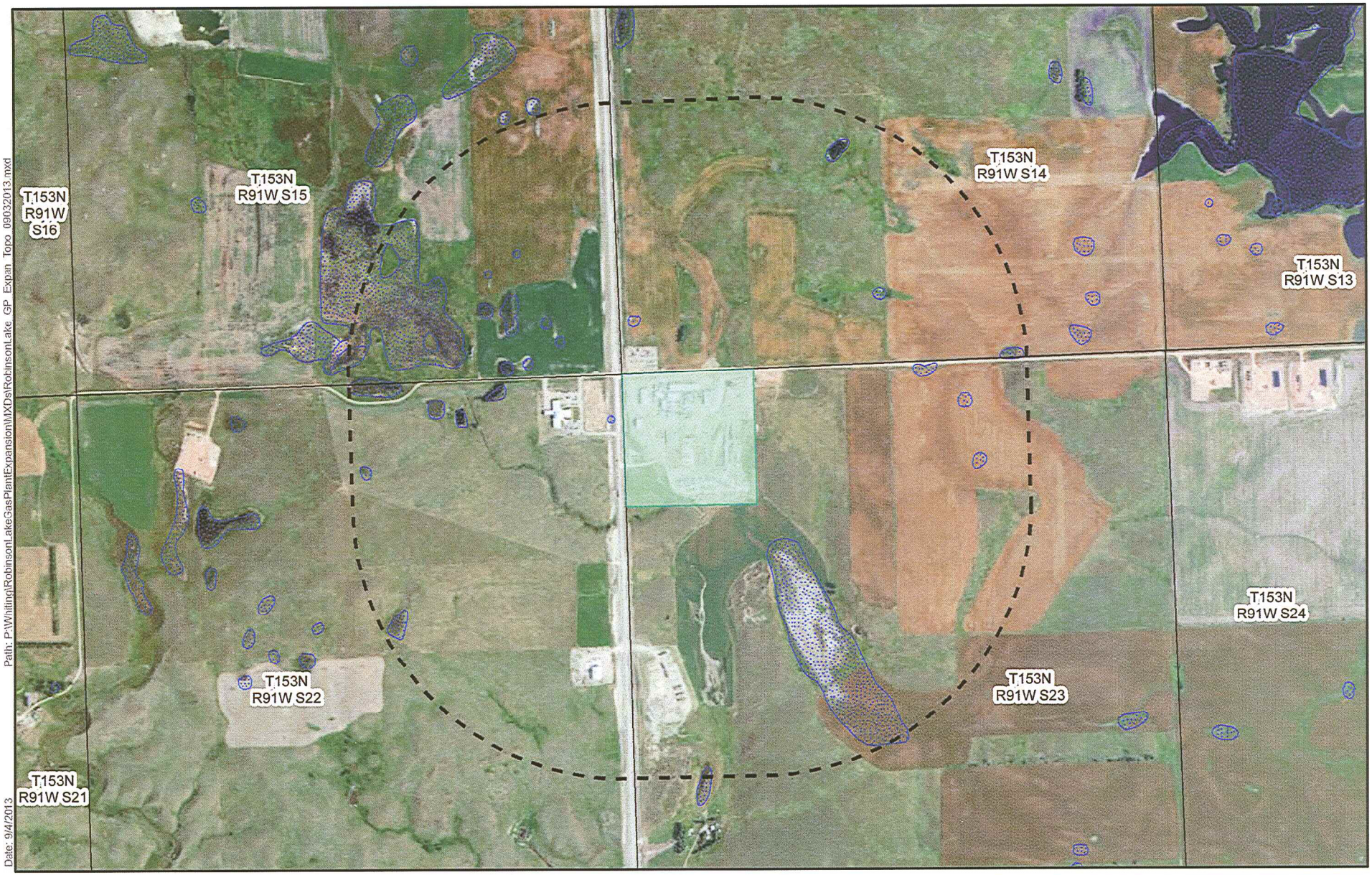
Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota



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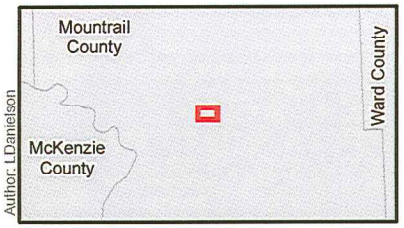
Date: 9/4/2013

Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

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Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota

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September 25, 2013

Paul Picha
Chief Archaeologist
State Historical Society of North Dakota
Archeology & Historic Preservation Division
North Dakota Heritage Center
612 East Boulevard Avenue
Bismarck, ND 58505-0830

Dear Mr. Picha,

Enclosed is a report entitled *A Class I and Class III Cultural Resource Inventory of the Whiting Petroleum Corporation Robinson Lake Gas Plant Expansion, Mountrail County, North Dakota*. The inventory was performed by SWCA Environmental Consultants on behalf of E3 Environmental, LLC, under the jurisdiction of the North Dakota Public Service Commission. Four areas within the existing gas plant will have additional equipment added including storage tanks and compression equipment. The entire area where each of the four proposed expansions is set to take place at the Robinson Lake Gas Plant facility has been completely disturbed by construction of the existing gas plant with thick layers of gravel, scoria and fill dirt visibly present. A total of 1.9 acres were inventoried for the proposed 1.9-acres of proposed expansions. As the entire area has been previously disturbed there was no need to survey additional buffers around each proposed expansion.

No cultural resources were identified within the project areas. Please contact me at (701) 258-6622 if you have any questions or concerns about the attached report. Thank you in advance for your time.

Sincerely,

William M. Harding

William M. Harding, RPA
Principal Investigator

WMH/dsr
Enclosures: 1

STATE HISTORICAL SOCIETY OF NORTH DAKOTA

September 30, 2013

Mr. William Harding, RPS
Principal Investigator
SWCA Bismarck Office
116 North 4th Street, Suite 200
Bismarck, ND 58501

NDSHPO REF.: 13-1468 PSC "A Class I and Class III Cultural Resource Inventory of the Whiting Petroleum Corporation Robinson Lake Gas Plant Expansion, Mountrail County, North Dakota" in portions of [T153N R91W Section 23]

Dear Mr. Harding,

We reviewed NDSHPO REF.: 13-1468 PSC "A Class I and Class III Cultural Resource Inventory of the Whiting Petroleum Corporation Robinson Lake Gas Plant Expansion, Mountrail County, North Dakota," and find the report acceptable. We concur with a "No Significant Sites" determination for the project change as described and mapped in the above-captioned report.

Thank you for the opportunity to review this project. If you have questions please contact either Paul Picha at ppicha@nd.gov or (701) 328-3574 or Susan Quinnell at squinnell@nd.gov or (701) 328-3576.

Sincerely,

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

Appendix D
Biology Report

Natural Resources and Wetland Determination Report for the Whiting Oil and Gas Corporation Robinson Lake Gas Plant Expansion Mountrail County, North Dakota

Prepared by
E3 Environmental LLC

September 23, 2013

Natural Resources and Wetland Determination Report for the Whiting Oil and Gas Corporation Robinson Lake Gas Plant Expansion Mountrail County, North Dakota

Prepared by:

Jennifer Kamm
Environmental Consultant

Reviewed by:

William F. McCarthy
Wildlife Biologist

E3 Environmental LLC
871 West Jefferson Avenue
Saint Paul, Minnsota 55102
651.282.0650

September 23, 2013

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

SECTION 1: Summary

E3 Environmental, LLC (E3) conducted natural resources and wetlands field surveys as well as sensitive plant and wildlife surveys on the behalf of Whiting Oil and Gas Corporation, for the proposed Robinson Lake Gas Plant Expansion Project.

Whiting's Robinson Lake Gas Plant Expansion Project would be located approximately 8 miles northeast of New Town, North Dakota. As proposed, the facility would be constructed on a 35 acre plot located in the NW ¼, Section 23, Township 153 North, Range 91 West in Mountrail County, as depicted in the map included in Appendix A. The project area is currently privately owned by Whiting and is developed as an existing gas plant.

Construction of the plant will include the installation of underground piping, above ground piping and compression. The major processing systems shall be located within the battery limits of the plant; starting from the inlet gas and condensate piping as they enter the plant. Once constructed the Robinson Lake Expansion Project will occupy approximately 23 acres (Site) of the 35 acre plot (Plot); the remaining acreage will serve as stormwater outfall, vehicle parking, and unused space for potential future expansion.

This natural resource and wetland evaluation report is prepared to supplement Whiting's submittal to the North Dakota Public Service Commission (PSC or Commission) of a request for waiver or reduction of procedures and time schedules and an application for a Certificate of Site Compatibility for its Robinson Lake Gas Plant Expansion Project.

SECTION 2: Methods

E3 reviewed U.S. Geological Survey (USGS) 7.5 minute topographic quadrangle maps; US Fish and Wildlife National Wetlands Inventory (NWI) maps; US Geological Survey National Hydrograph Data (NHD); and current and historical aerial photographs of the project area using Google Earth. The US Department of Agriculture (USDA) Natural Resources Conservation Service web soil survey, and the National Oceanic and Atmospheric Administration (NOAA) National Climate Data Center was also reviewed.

The presence/absence of wetlands was identified in the field using routine level 2 on-site delineation methods and criteria in accordance with the USACE *Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetlands Determination Manual: Great Plains Region Version 2.0* (Supplement) (USACE 2010). The Project is within the Northern Great Plains Land Resource Region F. Routine on-site delineation methods include characterization of vegetation, hydrology and soils at the site. The USACE *National Wetlands Plant List* was used to describe the taxonomy of plants surveyed and their wetland indicator status. Determination of wetland type is based on the classification system developed by Cowardin et al. (1979).

Waterbodies (i.e., ponds, creeks, streams, rivers) were identified by the presence of an ordinary high water mark (OHWM). Common identifiable indicators of an OHWM include open water or evidence of a clear, natural line visible on the bank, shelving, changes in soil characteristics, destruction of terrestrial vegetation, the presence of

litter and debris, and watermarks on structures that are inundated during normal high water conditions. Streams were classified as perennial, intermittent, or ephemeral based on field observations and review of depth to water table and flood frequency data available from the USDA NRCS. The OHWM typically represents the potential limits of the USACE jurisdiction. The USACE has full discretion in determining the jurisdictional status of referenced wetlands and waterbodies.

General and focused surveys were conducted, traversing the entire project area to search for sensitive species and habitats. These field surveys were conducted on September 13th, 2013. Wetlands, waterbodies and natural resource features identified were added to the project layout maps.

2.1 Field Conditions

E3 reviewed the National Climate Data Center, National Oceanic and Atmospheric Administration local climatological data for the Minot International Airport station. According to the monthly recorded rainfall from May through August and the U.S. Drought Monitor maps, field conditions during the time of the survey were at or above average relative to long term precipitation averages recorded for this location for this time of the year. It should be noted however, that the survey was conducted in September which is typically the driest portion of the growing season.

Table 1. Monthly Recorded Rainfall
Minot International Airport National Weather Station

Month	Recorded Precipitation (inches)	Normal Precipitation (inches)	Departure From Normal
May 2013	6.75	2.50	4.25
June 2013	4.59	3.58	1.01
July 2013	4.43	2.43	2.00
August 2013	2.77	2.04	0.73
Total	18.54	10.55	7.99

Source: National Oceanic and Atmospheric Administration (2013).

SECTION 3: Results

3.1 General Landscape Characterization

The proposed project is within the Northwestern Glaciated Plains (Level III) ecoregion which marks the westernmost extent of continental glaciation. The morainal landscape has significant surface irregularity and high concentrations of wetlands. The rise in elevation along the eastern boundary defines the beginning of the Great Plains. Land use is transitional between the intensive dryland farming on the Drift Plains of the Northern Glaciated Planes (Level III) to the east and the predominance of cattle ranching and farming to the west on the Northwestern Great Plains (Level III). Land use and land cover in the area is mainly tilled agriculture of spring wheat, barley, alfalfa, silage corn with some grazing on steep and saline or wet areas.

The Missouri Coteau Slope (Level IV) ecoregion declines in elevation from the Missouri Coteau to the Missouri River. Unlike the Missouri Coteau where there is a lack of streams, the Missouri Coteau Slope has a simple drainage pattern and fewer wetland depressions. The Coteau Slope is drained by several tributaries of the Missouri River. These tributaries form the major watersheds in Mountrail County. The White Earth River flows from north to South along the western edge of the County. The Little Knife River originates near the town of Stanley. It flows to the southwest and drains the west-central part of the Coteau Slope. Shell Creek drains the eastern part of the county, and East Shell Creek and Deepwater Creek drain the southeastern part. Due to the level to gently rolling topography in the Missouri Coteau Slope, there is more cropland than on the Missouri Coteau.

Surficial geology and bedrock of the area consists of Wisconsinan glacial till over Tertiary sandstone and shale in Cretaceous Pierre Shale.

Mountrail County climate is usually warm in summer with frequent spells of hot weather and occasional cool days. The county is very cold in winter, when arctic air frequently surges over the area. The county has 110-130 mean annual frost free days. In winter, the average temperature is 10 degrees F. In summer the average temperature is 65 degrees F. The mean air temperature min/max for January is -2/20 and July 59/86 degrees F.

Mean annual precipitation is 15-18 inches. Most of the precipitation falls during the warm period with about 80 percent falling April through September. It is normally heaviest in late spring and early summer. The average seasonal snowfall is about 40 inches. On average, 43 days of the year have at least 1 inch of snow on the ground. Winter snowfall is normally not too heavy, and it is blown into drifts, so that much of the ground is free of snow.

3.2 Wetlands

National Wetland Inventory (NWI) mapping for the area does not indicate the presence of wetlands within the Site. The nearest mapped NWI wetland is a PEMC wetland approximately 0.25-mile southeast of the Site. No areas within the 23-acre Site met any of the three mandatory wetland indicators of presence of hydrophytic vegetation, wetland hydrology, or hydric soils. The Site consisted entirely of a well-drained, maintained gravel pad with no vegetation present. A topographic map and aerial photographs are included in Appendix A. Site photographs are included in Appendix C.

3.3 Waterbodies

Crane Creek is the nearest waterbody, and is located adjacent to the Site on the southwest. Crane Creek drains to the south to the Van Hook Arm of Lake Sakakawea approximately 6.5 miles south of the Site. This creek is an ephemeral feature in the vicinity of the project area and was characterized by a dry gravel channel averaging 2 feet in width and less than 4 inches in depth. Sparse hydrophytic vegetation (*Echinochloa crus-galli* and *Rumex crispus*) was noted on the fringe of the creek but did not comprise a dominant in the vegetative cover based on percent areal cover. A

topographic map and aerial photographs are included in Appendix A. Site photographs are included in Appendix C.

3.4 Vegetation

Ecologists recorded all plants within the vegetative communities based on sample plots recording vegetative stratums in which each species was observed. Stratums recorded were tree, sapling and shrub, herbaceous, and woody vine as defined by the USACE *Wetlands Delineation Manual* (USACE 1987) and *Regional Supplement* (USACE 2010).

The Site is occupied by the existing natural gas plant which is a maintained gravel pad with no vegetation present. No trees, shrubs, herbs or woody vines were observed on the Site.

The undeveloped area within the 35-acre Plot, on the south side of the proposed 23-acre Site consists of mixed-grass prairie dominated by smooth brome grass (*Bromus inermis*), prairie cordgrass (*Spartina pectinata*), wild millet (*Echinochloa crus-galli*), ox-eye sunflower (*Heliopsis helianthoides*), wild bergamot (*Monarda fistulosa*), giant goldenrod (*Solidago gigantea*), curly dock (*Rumex crispus*), salsify (*Tragopogon porrifolius*), western snowberry (*Symphoricarpos occidentalis*), prairie sage (*Artemisia ludoviciana*), common yarrow (*Achillia millefolium*), wild licorice (*Glycyrrhiza lepidota*), purple coneflower (*Echinacea purpurea*), and prairie coneflower (*Ratibida columnifera*).

Applying the 50/20 rule and Prevalence index in representative sample plots, no areas met the wetland vegetation criteria for hydrophytic vegetation.

3.4.1 Woody Trees and Saplings

The 23-acre Site is occupied by the existing natural gas plant which is a maintained gravel pad with no vegetation present. No trees, saplings, shrubs, or woody vines were observed on the Site.

3.5 Hydrology

The Site was surveyed for presence of wetland hydrology as defined by the USACE *Wetlands Delineation Manual* (USACE 1987) and *Regional Supplement* (USACE 2010).

The Site consisted of a well-drained gravel pad. No primary or secondary indicators of wetland hydrology were observed. Discussion of depth to water table, and flood and ponding frequency within the Site is discussed below in Section 3.6 Soils.

3.6 Soils

The Site consists of gravel fill. No natural soil horizon exists within theSite. No soils were present that met a hydric soil criteria as defined by the USDA, NRCS Field Indicators of Hydric Soils in the US, Version 7.0, 2010 and errata. The table below summarizes depth to water table, flood frequency, ponding frequency, and hydrologic group of the soils within the 35-acre Plot as mapped by the USDA Web Soil Survey. A soils map for the Plot is included in Appendix B.

Table 2. Soils

Map Unit Symbol	Map Unit Name	Depth to Water Table (cm)	Flood Frequency	Ponding Frequency	Hydrologic Group
C132B	Williams-Zahl loams 3-6% slope	>200	None	None	C
C132C	Williams-Zahl-Zahill complex 6-9% slope	>200	None	None	C
C135D	Zahl-Williams loams 9-15% slope	>200	None	None	C
C810A	Bowdle loam 0-2% slope	>200	None	None	B
C825A	Divide loam 0-2% slope	76	None	None	C
C874C	Wabek-Appam complex 6-9% slope	>200	None	None	A

Source: USDA Web Soil Survey (2013).

3.7 Wildlife and Threatened and Endangered Species

The USFWS IPAC was accessed on September 4th, 2013 to obtain information regarding the presence of threatened and endangered species in Mountrail County, North Dakota. This information does not represent a comprehensive survey, but rather acknowledges the past and/or current presence of listed species. The lack of discovery of threatened or endangered species does not signify their non-existence in the area, but only that no primary or secondary indications of these species were recorded.

E3 completed a random survey of the whole project area for listed species and suitable habitat. A line-of-sight survey for raptor species was also conducted a distance of approximately 0.5 mile. An E3 ecologist noted all wildlife observed during the field survey. Wildlife sightings can involve primary observations (i.e., actual sighting of an animal) or secondary observation (i.e. observation of scat, tracks, or fur deposits).

A biological inventory encompassing the entire Site was conducted to study the presence or absence of protected species and critical habitat. A habitat analysis and tree/woody shrub inventory was also completed.

The 35 acre Plot is currently occupied by a 23 acre natural gas plant. Approximately 12 acres of undeveloped land on the southwest portion of the Plot consists of

northwestern Great Plains mixed-grass prairie. Crane Creek passes through this portion of the Plot.

Species commonly associated with northwestern Great Plains mixed-grass prairie and agricultural communities may be present on the undeveloped portion of the Plot. One turkey vulture was observed flying west of the Plot during the survey. No primary or secondary indication of the presence of federal or state species of concern were observed on the Site.

3.7.1 USFS Vegetation and Sensitive and Watch List Species

The U.S. Fish and Wildlife Service (FWS) administer several natural resource programs designed to identify and protect various plant and animal species of special status including habitats deemed critical.

3.7.1.1 Federally Protected Species Review

Under the authority of the Endangered Species Act, the FWS assesses wildlife populations for viability throughout their current and historic ranges. Species characterized as Threatened or Endangered and their critical habitats are identified and managed under the FWS ESA program. A review of the FWS published data identified the following listed species with the potential to occur within the study area:

Interior Least tern (*Sterna antillarum*) – Endangered
Whooping crane (*Grus americana*) – Endangered
Piping plover (*Charadrius melodus*) – Threatened
Pallid sturgeon (*Scaphirhynchus albus*) – Endangered
Gray wolf (*Canis lupus*) – Endangered
Sprague's Pipit (Anthus spragueii) – Candidate
Dakota Skipper (Hesperia dacotae) - Candidate

E3 Environmental has reviewed the available data describing the life history, critical habitat, and conservation measures associated with each species to evaluate the potential effects of the project on these resources, the results of this analysis is as follows:

Interior Least tern: The interior population(s) of the least tern has historically been associated with large river systems for breeding and migratory habitats. Breeding birds are known to breed colonies, utilizing sandbar habitat common to larger rivers. In North Dakota, the least tern is found primarily on the Missouri River from Garrison Dam south to Lake Oahe, and on the Missouri and Yellowstone Rivers upstream of Lake Sakakwea (USFWS 1990, 2010). No terns or their habitat were observed on the Site.

Effects Determination: No Effect.

Whooping crane: The whooping crane is a large bodied marsh species that breeds primarily in Canada and winters in the Gulf of Mexico. This species has been closely studied and monitored in recent years due to its small population. North Dakota provides migratory habitat for the species, providing roosting and feeding opportunities during migration. This species prefers larger wetland complexes for roosting habitat, typically using adjacent uplands for foraging opportunities. The proposed project area is currently developed as a natural gas plant. As such, the proposed project area is unlikely to support whooping crane migratory stopover.

Construction activities would likely serve as a deterrent, and once constructed the proposed facility would present a fairly prominent feature to be avoided relative to its surrounding landscape.

Effects Determination: May Affect, Is Not Likely to Adversely Affect.

Piping plover: The piping plover is associated with shorelines along small alkaline lakes, large reservoir beaches, and river islands and adjacent sand pits. Breeding birds select wide beaches with highly clumped vegetation covering less than 25% of the area. Regionally the Missouri River, 6.5 miles from the project Site, is known to host breeding populations of the plovers. It is unlikely that migrating piping plover would visit the project area during migration. The project Site is not located within designated piping plover critical habitat.

Effects Determination: No Effect.

Pallid sturgeon: The pallid sturgeon is known to occur in the Missouri River below Fort Peck Dam to the headwaters of Lake Sakakawea. North Dakota Game and Fish have caught and released pallid sturgeon in nets in Lake Sakakawea between New Town and Van Hook. Crane Creek is a tributary to the Van Hook Arm of Lake Sakakwea approximately 6.5 miles from the proposed project Site. This species is sensitive to changes in water quality due to turbidity, water temperature, and flow. Construction activities, hydrostatic testing, and plant operations will use best management practices to avoid potential pollution from adversely affecting water quality.

Effects Determination: No Effect.

Gray wolf: The gray wolf is a large carnivore that through conservation measures has experienced strong population recovery, particularly in the Great Lakes states of the upper Midwest. As populations rebound, individuals may break from packs to explore opportunities to establish packs in unoccupied territory. Roaming individuals can cover great distances without establishing viable breeding populations in previously unoccupied habitat(s). This species is not tolerant of human disturbance and will tend to avoid interaction with humans. The activities associated with construction and later plant operations would likely serve as a deterrent to this species.

Effects Determination: No Effect.

3.7.2 Migratory Bird Treaty Act/Bald and Golden Eagle Protection Act

3.7.2.1 Bald Eagle (Haliaeetus leucocephalus)

Federal Status: Delisted in 2007; protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act
Effects of Project: No adverse effects anticipated

The bald eagle feed on fish and carrion and typically roosts in large trees near a water source. Bald eagle nesting habitat is typically any mature stands of conifer or cottonwood trees in association with rivers, streams, reservoirs, lakes, or any significan6t body of water. Bald eagles are uncommon in North Dakota and are usually observed along the Missouri River and Yellowstone River. Bald eagles frequently migrate through the grassland habitats; however, no bald eagles or nests

were observed during the field surveys. Suitable nesting and roosting habitat is not available in the project area. Therefore, no adverse effects to bald eagles are anticipated.

3.7.2.2 Golden Eagle (Aquila chrysaetos)

Federal Status: Unlisted; protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act.
Effects of the Project: No adverse effects anticipated.

3.7.3 Wildlife Observed

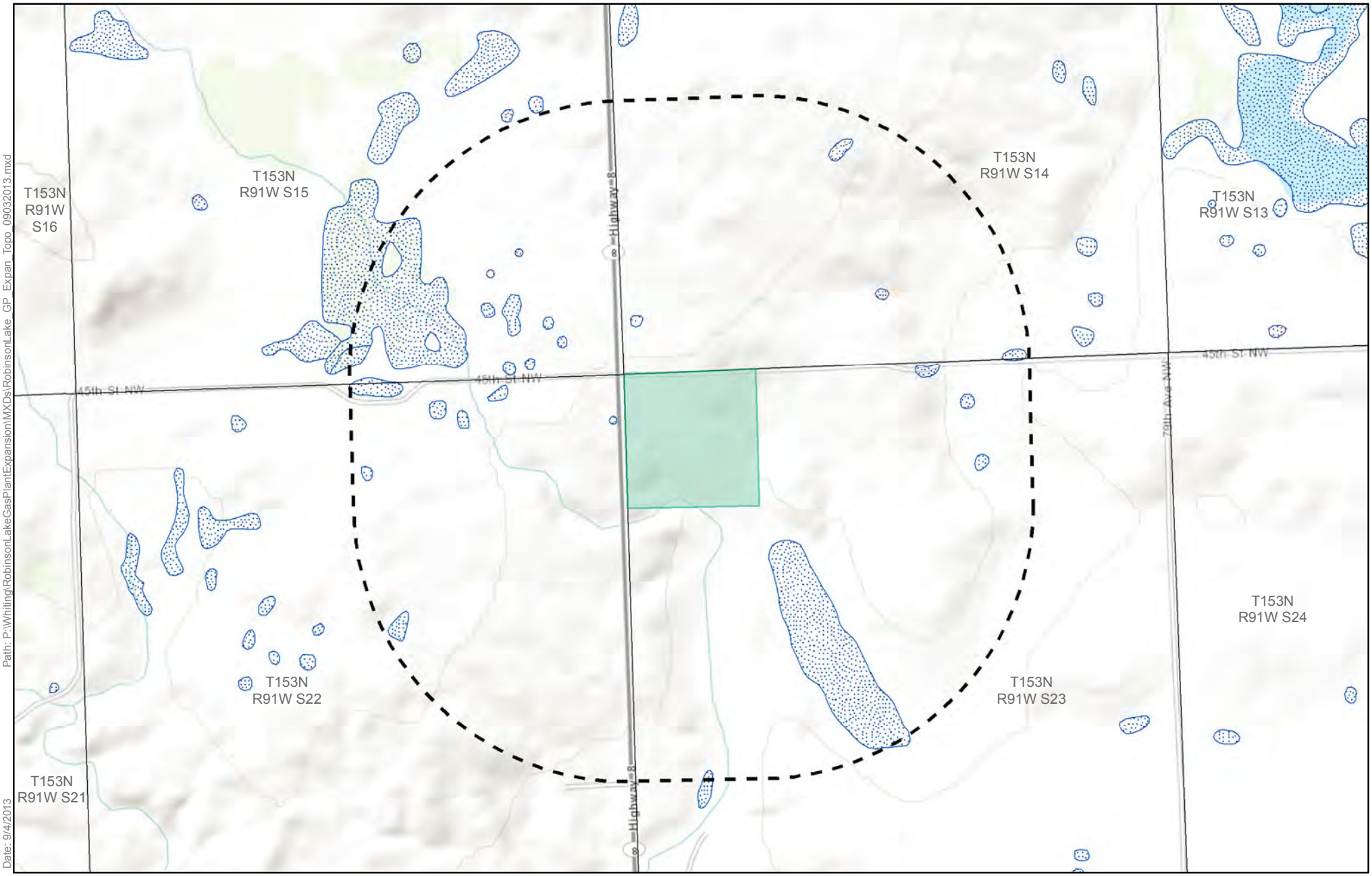
During the field survey, E3 ecologists observed 2 bird species Turkey vulture (*Cathartes aura*) and Canada goose (*Branta Canadensis*). These are species that use grasslands and the associated habitat in the survey area. Birds may be affected both directly by incidents with construction equipment (nest destruction) or indirectly through fragmentation of habitat or introduction of noxious weeds as a result of construction activities.l Maigratory birds are protecte by the Migratoary Bird Treaty Act (16 United States Code 703 et seq.), which prohibits the "take" of individuals and nests.

SECTION 4: Conclusions and Recommendations

1. E3 ecologists confirmed that no areas within the fenced Site met any of the three mandatory wetland indicators of presence of hydrophytic vegetation, wetland hydrology, or hydric soils.
2. No wetlands will be impacted by the project.
3. E3 confirmed that no perennial, intermittent, or ephemeral waterbodies are present within the fenced Site.
4. No threatened or endangered species were observed during the field survey. The know species that occur in Mountrail County are not likely to be detrimentally impacted by construction activities.

Appendix A

Topographic Map and Aerial Photograph



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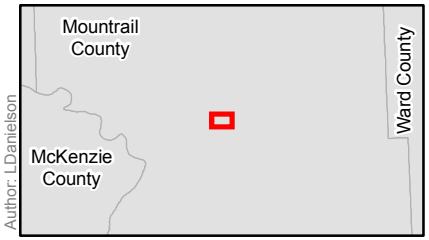
Date: 9/4/2013

Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

Enhancing Execution with Experience

0 380 760 1,520 Feet

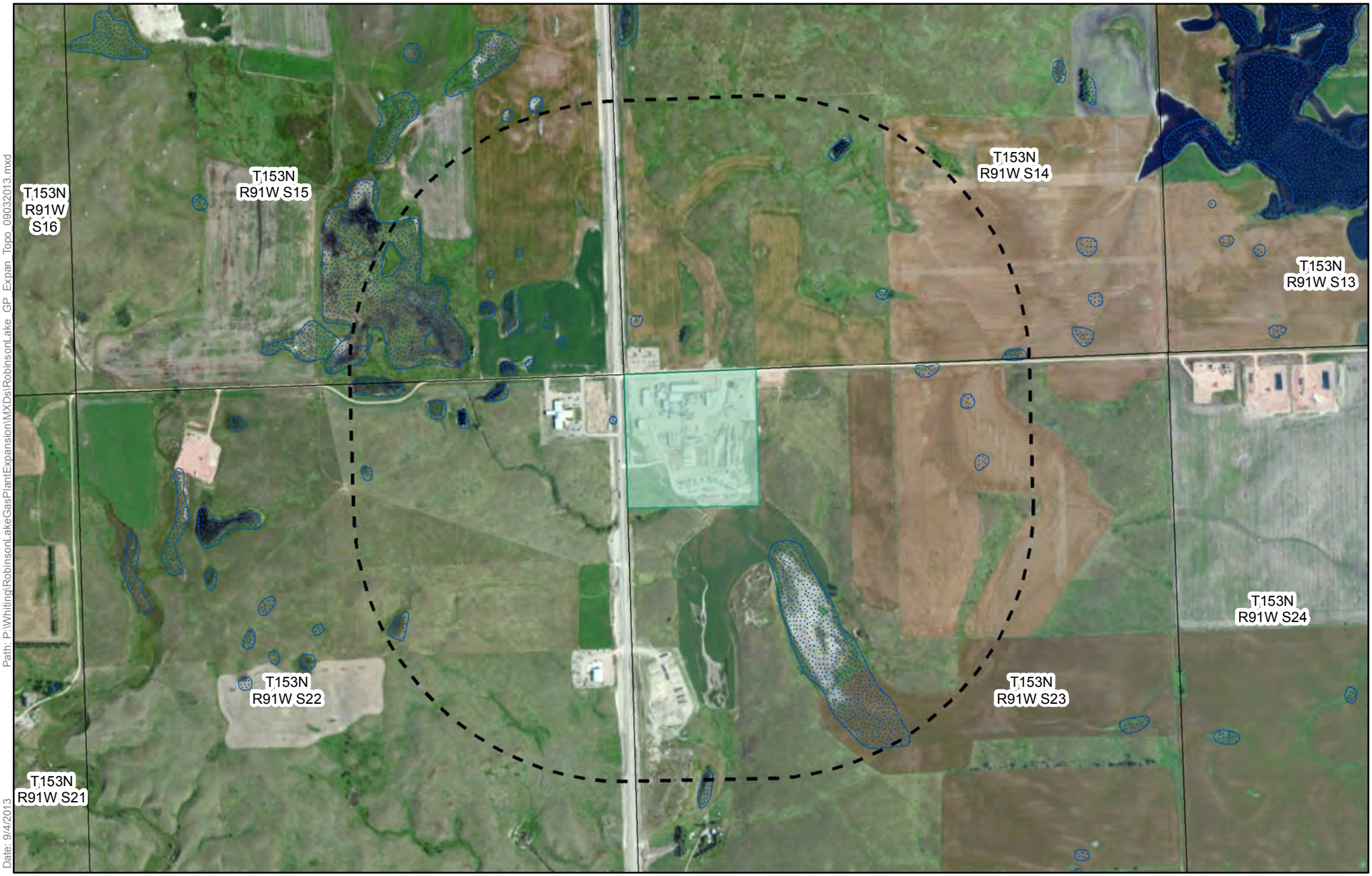
1:15,000

Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota



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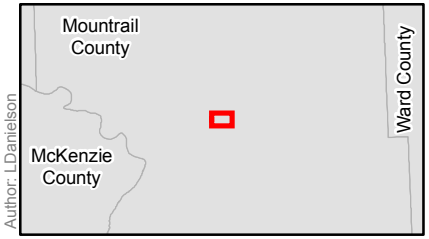
Date: 9/4/2013

Author: LDanielson



Robinson Lake Gas Plant

Study Area

NWI Wetland

WHITING

Enhancing Execution with Experience

0 380 760 1,520 Feet

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Whiting Oil and Gas Corporation

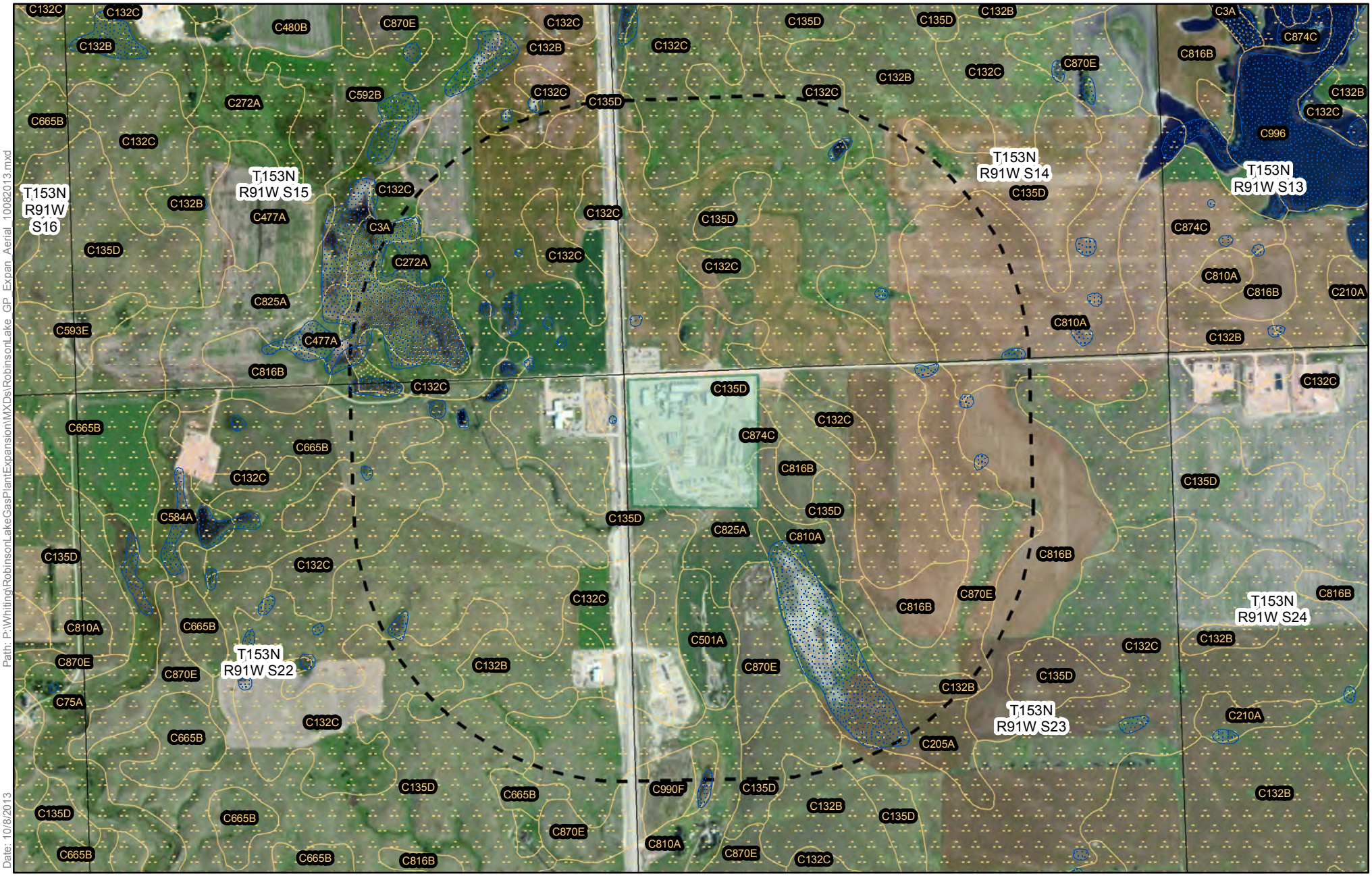
Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota

Appendix B

USDA Soil Survey Map



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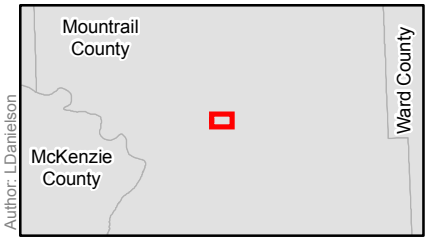
Date: 10/8/2013

Author: LDanielson



NWI Wetland
Robinson Lake Gas Plant
Study Area
All hydric
Partially hydric
Not hydric

WHITING

Enhancing Execution with Experience

0 380 760 1,520 Feet

1:15,000

Whiting Oil and Gas Corporation

Robinson Lake Gas Plant Expansion

Location Map

Mountrail County, North Dakota

Appendix C

Site Photographs

Photo 1. View of condensate storage area facing north.

Photo 2. View of condensate storage area facing northeast.

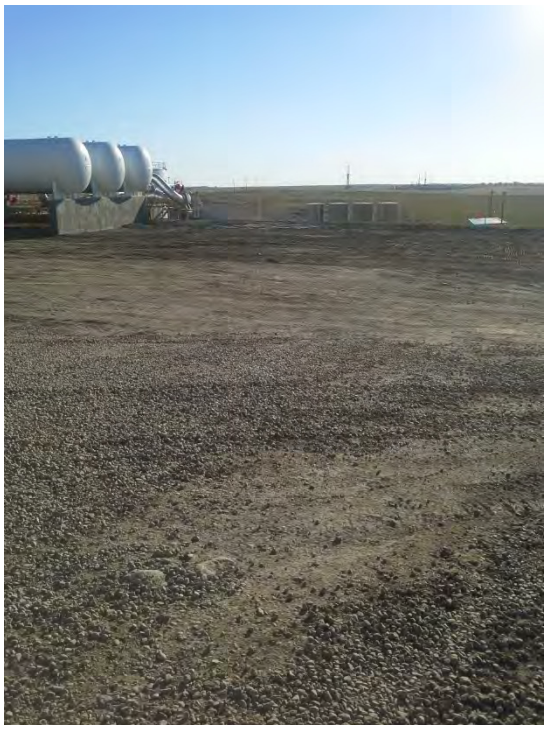


Photo 3. View of proposed compression expansion area facing north.

Photo 4. View of east side of proposed compression expansion area facing north.

Appendix E
Cultural Resources Report

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

September 9, 2013

E3 Environmental, LLC
Attn: William McCarthy
871 Jefferson Avenue
St. Paul, Minnesota 55102

SWCA Project Number: 27432

RE: Class I Inventory Results for the Whiting Gas and Oil Corporation Robinson Lake Gas Plant Expansion Project

Dear Mr. McCarthy,

On September 9, 2013, SWCA Environmental Consultants (SWCA) completed a Class I Cultural Resource Inventory for the proposed Whiting Gas and Oil Corporation Robinson Lake Gas Plant Expansion Project (Robinson Lake Project) located in the northwest quarter of Section 23, Township (T) 153 North (N), Range (R) 91 West (W), in Mountrail County, North Dakota. This letter report provides a description of methods used by SWCA archaeologist Matthew Cox to determine whether previously recorded cultural resources are located within the proposed project area.

METHODS

Class I Survey

The Class I cultural resource files search was conducted by Mr. Cox for the project location on September 9, 2013, of files maintained at the State Historical Society of North Dakota. Five previously recorded sites are located in the 1-mile buffer surrounding the project area (Table 1).

Table 1. Cultural Resources within 1 Mile of the Project Area.

Site	Location	Description	NRHP Eligibility	Recommendations
32MN699	S½ NW¼ NE¼ Section 27, T153N R91W	Stone Circle	Unevaluated	No Further Work*

Site	Location	Description	NRHP Eligibility	Recommendations
32MN700	N½ SE¼ SE¼, SE¼ SE¼ SE¼ Section 22, T153N R91W	Stone Circle	Unevaluated	No Further Work*
32MN873	NE¼ NE¼ SE¼ Section 27, T153N R91W	Cairn	Unevaluated	No Further Work*
32MN1035	SE¼ SW¼ NE¼ Section 27, T153N R91W	Cultural Material Scatter/Foundation	Recommended Not Eligible	No Further Work
32MNX112	NE¼ Section 22, T153N R91W	Cultural Material Scatter	Unevaluated	No Further Work*

* No further work is required for this site in regards to the current project; any additional work in the area would require a reevaluation of the site on an individual project basis.

CONCLUSIONS

On September 9, 2013, SWCA completed a Class I Cultural Resources Inventory of the proposed Robinson Lake Project located in the northwest quarter of Section 23, T153N, R91W, in Mountrail County, North Dakota. The results reveal that five sites are located within the study area (32MN699, 32MN700, 32MN873, 32MN1035, and 32MNX112). All of the cultural resources are located outside of the proposed project area and will not be affected by the proposed project; therefore, no further work is recommended. However, if the project footprint were to shift, additional avoidance measure may be required. Any additional work in the area would require a reevaluation of each site on an individual project basis.

Please feel free to contact me at 701.258.6622 or at dsreinhart@swca.com should you have any further questions or concerns regarding the information assembled during SWCA's Class I cultural resources file search.

Sincerely,

Damien S. Reinhart
Cultural Resources Lead/Project Manager

DSR:mc

SWCA Environmental Consultants
116 N 4th Street, Suite 200
Bismarck, ND 58501

SWCA
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

North Dakota Negative Results Cultural Resource Report

Date of Report:	September 25, 2013
Project Name/Report Title:	A Class I and Class III Cultural Resource Inventory of the Whiting Petroleum Corporation Robinson Lake Gas Plant Expansion, Mountrail County, North Dakota
Project Proponent/Sponsor:	E3 Environmental, LLC, 871 Jefferson Avenue, St. Paul, Minnesota 55102
Lead Agency:	North Dakota Public Service Commission (NDPSC), Bismarck, North Dakota
SWCA Project Number:	27432
Principal Investigator:	William Harding
Authors of Report:	Cole Wandler
Persons Performing Fieldwork:	Scott Yost and Damien Reinhart, SWCA Environmental Consultants (SWCA)
Date of Fieldwork:	September 13, 2013
Acres/Area Inventoried:	Whiting Robinson Lake Gas Plant Expansion
	Total Area Inventoried | ***1.9 non-overlapping acres***
	Existing Gas Plant Area | 28.16 acres
	Proposed Expansion Areas | 1.9 acres
Legal Locations	NW¼ NW¼ of Section 23, Township (T) 153 North (N), Range (R) 91 West (W), Dunn County, North Dakota; Belden SE (1981), North Dakota, U.S. Geological Survey (USGS) Topographic Quadrangle
ND Prehistoric Study Unit:	Garrison
ND Historic Study Unit:	21

Location Descriptions

Whiting Petroleum Corporation (Whiting) is proposing to expand the existing Robinson Lake Gas Plant on private lands in Mountrail County, North Dakota. The project area is approximately 6.0 miles north of the intersection of State Highway 8 and State Highway 23; 8.4 miles northeast of New Town; 6.4 miles southwest of Epworth; and 6.0 miles south of Belden. The surrounding area is defined by rolling upland prairie, with numerous wetlands dotting the surrounding landscape. The area is drained to the southwest by Crane Creek, which drains into the Van Hook Arm of Lake Sakakawea approximately 6.8 miles south.

The proposed plant expansion is located on an indistinct rise above Crane Creek to the south. Due to previous development, no vegetation occurred within the project area. Ground surface visibility was 100 percent across the project area.

Project Description

SWCA conducted a Class I and Class III cultural resource inventory on behalf of E3 Environmental, LLC, for the currently proposed Whiting Robinson Lake Gas Plant expansion. The project would involve construction of additional infrastructure at the existing Robinson Lake Gas Plant. Whiting plans to expand the existing Robinson Lake facility by adding additional equipment within an existing fenced area surrounding the gas plant, including compression equipment. As a result, the North Dakota Public Service Commission will claim jurisdiction over the project. The fenced Robinson Lake Gas Plant has previously impacted an area of approximately 28.16 acres.

SWCA conducted 1.9 acres of discontinuous survey surrounding the proposed expansion locations. The discontinuous areas consisted of four blocks on which previous infrastructure had already been built. As a result, the Class III survey consisted of a surface examination of previous disturbance surrounding the infrastructure. As proposed, the project will remain entirely within the inventoried area.

Files/Records Search Results

As part of the initial phase of this investigation, SWCA conducted a background search of archaeological and historical literature and records for the project area and surrounding 1-mile area on September 9, 2013. Researchers reviewed relevant record holdings at the State Historical Society of North Dakota for information regarding previously recorded historic and prehistoric sites located within the project area.

Seven previous cultural resource inventories have been conducted in the area between 1995 and 2011 (Table 1), the majority of which are related to resource development, with two reports detailing North Dakota Department of Transportation-related projects. The files search identified five previously recorded cultural resources within 1 mile of the project area. Of these five resources, two are prehistoric sites, one is an historic site, one is of unknown age or cultural affiliation, and one is a site lead of unknown age or cultural affiliation (Table 2). The two prehistoric sites (32MN699 and 32MN700) consist of stone circles and the site of unknown age or cultural affiliation (32MN873) is a stone cairn. The historic site (32MN1035) includes the remains of a foundation and a cultural material scatter. No archaeological or historical information was recorded on the site form for the cultural material scatter site lead (32MNX112), and as a result its age and affiliation are unknown. Three sites (32MN699, 32MN700, and 32MN873), in addition to the site lead (32MNX112), remain unevaluated regarding their National Register of Historic Places eligibility status; the historic site (32MN1035) is considered not eligible for the National Register of Historic Places.

Table 1. Previous Cultural Resource Inventories Identified within 1 Mile of Project Area.

Manuscript Number	Location	Title	Author	Year
006449	Section 22, T153N, R91W	North Dakota Department of Transportation: Safety Project Cultural Resource Review	R. Christensen	1995
008769	Section 27, T153N, R91W	STATEOP-426/427: Fladeland/McNamara Pits Class III Inventory Report, Mountrail Co., ND	B. Christensen	2004
008770	Section 22, T153N, R91W	STATEOP-428: David McNamara Pit Class III Inventory Report, Mountrail Co., ND	B. Christensen	2004
009380	Section 22, T153N, R91W	McNamara Pit: A Class III Cultural Resource Inventory in Mountrail Co., ND	E. Stine	2005
010763	Section 14, T153N, R91W	Robinson Lake: A Class III Cultural Resource Inventory for a Proposed Pipeline Corridor in Mountrail Co., ND	E. Stine and A. Barth	2008
011508	Section 15, T153N, R91W	Welfen Material Source Area: A Class III Cultural Resource Inventory, Mountrail Co., ND	G. Jakel and W. Burns	2010
012450	Sections 14, 15, 22, 23, 26, 27, T153N, R91W	Highway 8: A Class III Cultural Resource Inventory in Mountrail Co., ND	E. Stine	2011

Table 2. Previously Recorded Sites Identified within 1 Mile of Project Area.

Site Number	Location	Site Type(s)	Cultural Affiliation	NRHP Eligibility
32MN699	S½ NW¼ NE¼ Section 27, T153N, R91W	Stone Circle	Unknown Prehistoric	Unevaluated
32MN700	N½ SE¼ SE¼, SE¼ SE¼ SE¼ Section 22, T153N, R91W	Stone Circle	Unknown Prehistoric	Unevaluated
32MN873	NE¼ NE¼ SE¼ Section 27, T153N, R91W	Cairn	Unknown	Unevaluated
32MN1035	SE¼ SW¼ NE¼ Section 27, T153N, R91W	Cultural Material Scatter/Foundation	Unknown Historic	Recommended Not Eligible
32MNX112	NE¼ Section 22, T153N, R91W	Cultural Material Scatter Site Lead	Unknown	Unevaluated

NRHP = National Register of Historic Places

Field Methods and Survey Conditions

A cultural resource inventory was conducted for the proposed Robinson Lake Gas Plant expansion on September 13, 2013, by Scott Yost and Damien Reinhart, SWCA archaeologists. Pedestrian survey methods were used, including parallel and sinuous transects spaced at no more than 30 meters apart. In total, 1.9 acres were surveyed around the proposed expansion areas. Bare ground surface visibility was 100 percent at the time of survey, as all survey occurred within previously disturbed areas. The project area has been impacted by oil and gas exploration activities and previous construction of infrastructure. As a result, no intact soils remain.

Photographs were taken of the proposed expansion area, and global positioning system tracks and points were collected for the expansion location. Notes were also taken during the inventory, and all photographs, global positioning system and geographic information systems data, and notes are on file at SWCA's Bismarck, North Dakota, office under project number 27432. Maps of the inventoried area are attached, as are appropriate photographs of the project area.

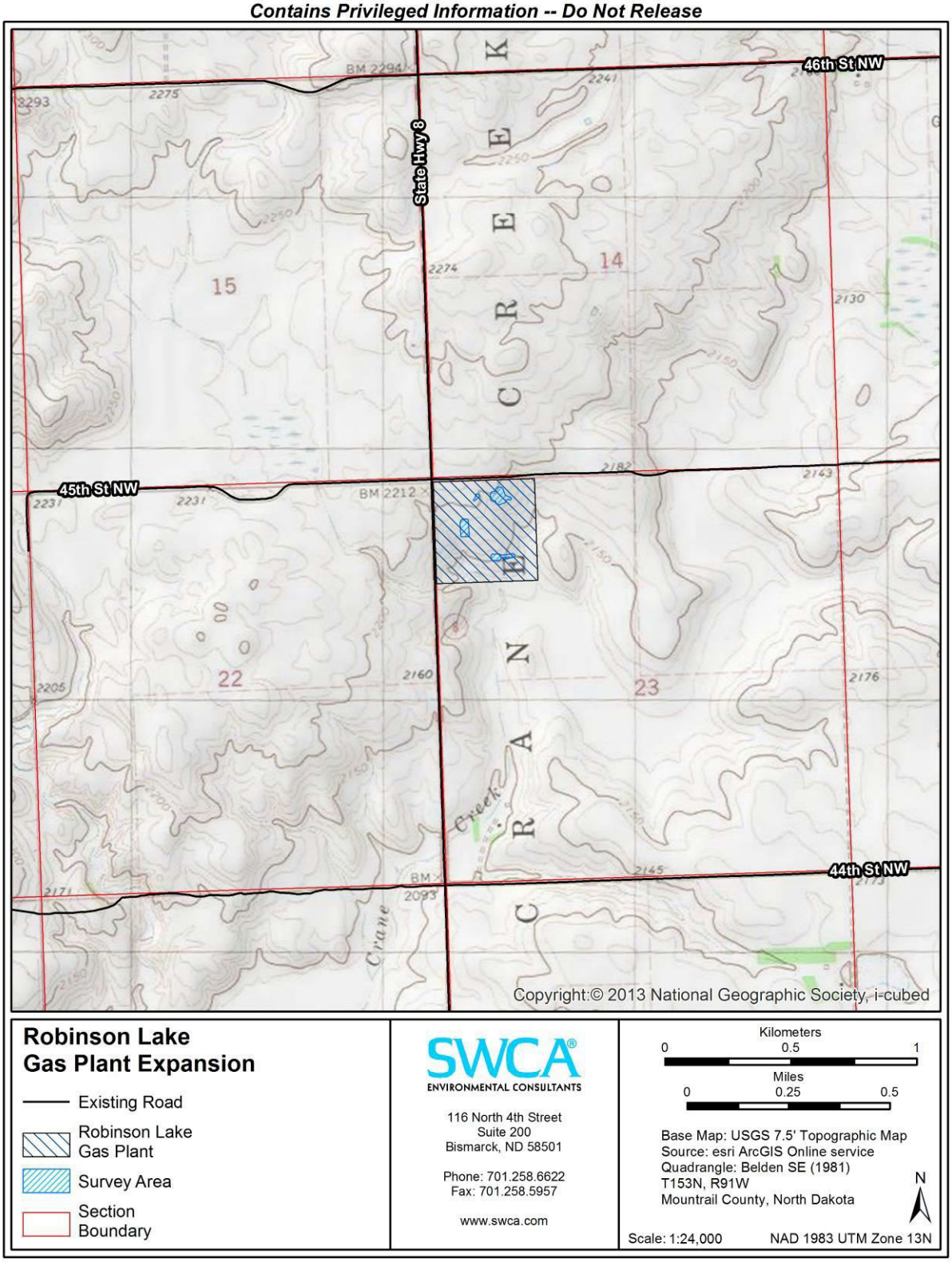
Results and Recommendations

No cultural resources were observed during the course of the inventory. Based on the negative findings, it is recommended that a determination of *No Significant Sites Affected* be granted for the project to proceed as planned.

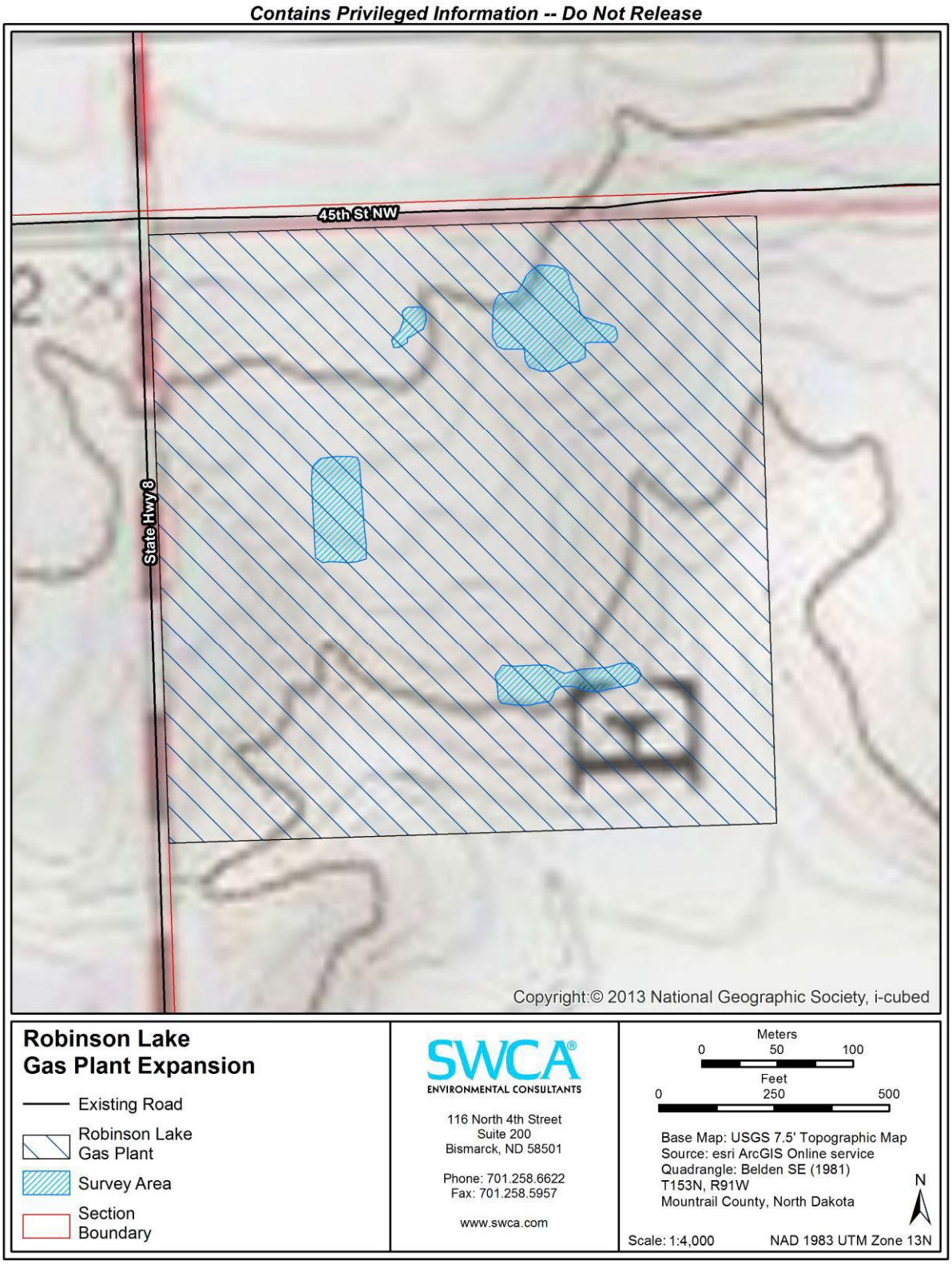
- Overview of proposed expansion area at the northwest corner of the gas plant, facing north.
- Photographed by D. Reinhart on September 13, 2013.
- Image has not been altered.

- Overview of proposed expansion area at the northeast corner of gas plant, facing north.
- Photographed by D. Reinhart on September 13, 2013.
- Image has not been altered.

Contains Privileged Information -- Do Not Release



Project location map at 1:24,000-scale showing inventoried area.
(Belden SE [1981], North Dakota, USGS 7.5' Quadrangle)



Project location map at 1:4,000-scale showing inventoried area.
(Belden SE [1981], North Dakota, USGS 7.5' Quadrangle)

Appendix F
10-Year Plan

WHITING

Whiting Oil and Gas Corporation

September 6, 2013

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

Re: Whiting Oil and Gas Corporation
Ten-Year Plan

Dear Mr. Nitschke:

Enclosed please find ten copies of Whiting Oil and Gas Corporation's Ten-Year Plan for 2013.

Sincerely,

Phil Archer
Facilities Manager

Enclosure: Ten-Year Plan

cc: Marcia Lamb, Billings County Auditor
Kay Haag, Stark County Auditor
Joan Hollekim, Mountrail County Auditor

Whiting Oil and Gas Corporation
Ten-Year Plan
North Dakota

Whiting Oil and Gas Corporation (Whiting) hereby submits to the North Dakota Public Service Commission (PSC), its Ten-Year Plan pursuant to North Dakota Century Code § 49-22-04 and North Dakota Administrative Code Chapter 69-06-02.

SECTION A: Existing Energy Conversion Facilities.

Whiting currently has no existing Energy Conversion Facilities as defined in North Dakota Century Code § 49-22-3(5).

SECTION B: Energy Conversion Facilities Under Construction.

Whiting has no Energy Conversion Facilities under construction as defined in North Dakota Century Code § 49-22-3(5).

SECTION C: Proposed Energy Conversion Facilities on Which Construction is Intended Within the Ensuing Five Years.

Whiting is currently expanding the existing Robinson Lake Gas Plant from 80 million cubic feet of inlet gas capacity per day (MMcfd) to 97.5 MMcfd. Whiting plans to further expand to 110 MMcfd in 2014, which triggers the definition of an Energy Conversion Facility as defined in North Dakota Century Code § 49-22-3(5). Whiting is preparing a siting application and will submit the application for the Robinson Lake Energy Conversion Facility within the next few months. Additionally, Whiting may continue to expand the facility in future years if third party natural gas volumes in the area continue to increase.

SECTION D: Proposed Energy Conversion Facilities During the Next Ten-Year Time Period.

Whiting has no proposed energy conversion facilities during the next ten-year time period.

SECTION E: Existing Transmission Facilities (Electric).

Whiting has no existing electrical transmission facilities.

SECTION F: Existing Transmission Facilities (Pipeline).

1. Location:

Whiting currently has in operation one natural gas and one oil transmission pipeline. The natural gas transmission pipeline begins at the Robinson Lake Processing Plant located 17 miles south of Stanley, North Dakota in Mountrail County. This pipeline, referred to as the Robinson Lake 6-Inch Pipeline, proceeds north and interconnects with the Williston Basin Interstate Pipeline system, located at Stanley. The oil transmission pipeline, referred to as the Belfield Oil Pipeline, begins at the Belfield Oil Terminal located in Billings County and runs approximately 7 miles northeast to Bridger Lake's Skunk Hill Terminal. Attached is a system map showing the location of the pipeline routes.

2. Type and Capacity: The design specifications for the transmission pipeline facility are as follows:

Design Specification	Robinson Lake Pipeline
a. Product Type	Natural Gas
b. Length - miles	16.5
c. Pipe Size – inches O.D.	6
d. Max. Design Operating Pressure - psig	2220, 1440
e. Max. Design Flow Rate	30 MM ft^3 /day
f. Compressor or pumping station specifications	N/A
g. Minimum Cover Over Pipe – inches	48

Design Specification	Belfield Oil Pipeline
a. Product Type	Crude Oil
b. Length – miles	6.8
c. Pipe Size – inches O.D.	8
d. Max. Design Operating Pressure - psig	500
e. Max. Design Temperature - degrees Fahrenheit	120
f. Max. Design Flow Rate - barrels/day	60,000
g. Compressor or pumping station specifications	N/A

3. The in-service date for the Robinson Lake 6-Inch Pipeline was September 2008 and the in-service date for the Belfield Oil Pipeline was February 2012.

4. There is no projected retirement date during the next ten-year period for the pipeline facilities.

SECTION G: Proposed Transmission Facilities on Which Construction is Intended Within the Ensuing Five Years (Electric).

Whiting has no proposed electric transmission facilities on which construction is intended within the ensuing five years.

SECTION H: Proposed Transmission Facilities on Which Construction is Intended Within the Ensuing Five Years (Pipeline).

Whiting has no proposed transmission facilities on which construction is intended within the ensuing five years.

SECTION I: Proposed Transmission Facilities During the Next Ten-Year Time Period (Electric and Pipeline).

Whiting has no proposed electric or pipeline transmission facilities proposed during the next ten-year time period.

SECTION J: Regional Coordination.

The purpose of Whiting's transmission pipelines is to move product from Bakken production fields into existing interstate pipeline systems. Whiting is not attempting to coordinate its plans with other utilities serving the area as part of a single regional plan. However, as expansion plans develop, affected utilities have and will be contacted.

SECTION K: Environmental Information.

Whiting completed its environmental field studies and agency consultations for the Robinson Lake 6-Inch Gas Pipeline Project in 2008 and the Belfield Oil Pipeline Project in 2011. Whiting's applications for a Certificate of Corridor Compatibility and Route Permit fully describe its efforts to identify and develop environmental mitigation measures pursuant to the North Dakota Century Code § 49-22-08 and North Dakota Administrative Code § 69-06-08-01. Whiting will complete required field studies and agency consultations for the upcoming Robinson Lake Energy Conversion Facility in accordance with North Dakota Century Code § 49-22-08 and North Dakota Administrative Code § 69-06-08-01.

SECTION L: Projected Demand for Service.

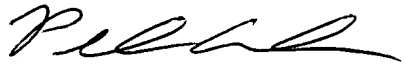
Whiting's primary business operation in North Dakota is oil and gas exploration and production, as opposed to the transportation of oil and gas through transmission pipelines. Whiting began exploration and production work for oil and gas from the Bakken formation in 2007, and since then has been a leader in this area. Whiting's growth/presence in North Dakota has increased from being the 5th largest producer in 2005 to being the top 1 or 2 producer in the state today.

As Whiting develops plays it is considering all options to move oil and gas from the field to market through connections into the interstate pipeline transmission system. In locations where an existing transmission pipeline is not available to move product, or when Whiting believes an existing third-party transmission pipeline operator is not able to respond quickly enough or in an economically feasible fashion, Whiting is implementing transportation opportunities on its own, as needed, through building its own transmission pipelines.

While Whiting does not have any current plans to build future transmission pipelines. It does plan to continue aggressive exploration and production programs in North Dakota for the next several years. Projections for oil and gas production from the Bakken and Three Forks formations indicate that there is significant recoverable oil and gas left in both formations. Based on Whiting's successful drilling programs, and the expected continuing demand for oil and gas, Whiting could chose to respond to a market opportunity and determine that building a future transmission line or energy conversion facility is economically feasible. Further, as Whiting develops future fields it also desires to minimize their dependency on trucks to move the oil which will reduce safety concerns and the overall impact on local infrastructure, all of which supports the concept of a potential future transmission pipeline.

Respectfully submitted this sixth day of September, 2013.

Whiting Oil and Gas Corporation
1700 Broadway, Suite 2300
Denver, CO 80290



Phil Archer
Facilities Manager

Enclosure: Whiting Transmission System map

cc: Marcia Lamb, Billings County Auditor
Kay Haag, Stark County Auditor
Joan Hollekim, Mountrail County Auditor