



Hiland Crude, LLC
a Kinder Morgan company

Hiland Crude, LLC
a subsidiary of Kinder Morgan, Inc.

Gullickson Reroute Pipeline Project
McKenzie County, North Dakota

North Dakota Public Service Commission
Consolidated Application for Certificate of
Corridor Compatibility and Route Permit

Prepared by:



February 2025

TABLE OF CONTENTS

INTRODUCTION 1

1.0 SIZE AND TYPE OF FACILITY 1

 1.1 TYPE 1

 1.2 SIZE 1

 1.3 LENGTH 2

 1.4 ABOVEGROUND FACILITIES 2

2.0 DESIGN OF THE FACILITY 2

 2.1 DESIGN OF PROPOSED FACILITY 2

 2.2 PURPOSE AND NEED OF THE FACILITY 2

 2.3 GENERAL AREA TO BE SERVED 3

 2.4 CAPACITY 3

 2.5 TECHNOLOGY TO BE DEPLOYED/EMPLOYED 3

 2.6 TYPE OF PRODUCT TO BE TRANSMITTED 3

 2.7 SOURCE OF PRODUCT TO BE TRANSMITTED 3

 2.8 FINAL DESTINATION OF PRODUCT 3

 2.9 WIDTH OF RIGHT-OF-WAY 3

 2.10 REQUIREMENT FOR AND GENERAL LOCATION OF ANY NEW ASSOCIATED FACILITIES 4

 2.11 ESTIMATED DISTANCE BETWEEN SURFACE STRUCTURES FOR PIPELINE FACILITIES 4

 2.12 MAXIMUM DESIGN OPERATING PRESSURE AND TEMPERATURE FOR PIPELINE FACILITIES 4

 2.13 MAXIMUM DESIGN FLOW RATE FOR PIPELINE FACILITIES 4

 2.14 NUMBER AND GENERAL LOCATION FOR COMPRESSOR OR PUMPING STATIONS 4

 2.15 ESTIMATED TOTAL COST OF CONSTRUCTION 5

 2.16 PREFERRED LOCATION OF FACILITY 5

 2.17 PREFERRED LOCATION OF CORRIDOR 5

 2.18 DESCRIPTION OF ROW PREPARATION AND CONSTRUCTION AND RECLAMATION PROCEDURES 6

 2.19 LANDOWNER NOTIFICATION, EASEMENT ACQUISITION, AND COMPENSATION 7

 2.20 USE OF EMINENT DOMAIN 7

 2.21 LANDOWNER INDEMNITY PROVISIONS 8

 2.22 PIPELINE INSURANCE COVERAGE 8

3.0 SCHEDULE 8

 3.1 OBTAINING CERTIFICATE OF CORRIDOR COMPATIBILITY 8

 3.2 OBTAINING ROUTE PERMIT 8

 3.3 COMPLETING ROW ACQUISITION 8

 3.4 STARTING CONSTRUCTION 8

 3.5 COMPLETING CONSTRUCTION 8

 3.6 TESTING OPERATIONS 8

 3.7 COMMENCING OPERATIONS 8

4.0 ALTERNATIVES 8

 4.1 ALTERNATIVES TO THE PROPOSED FACILITY 8

 4.1.1 No Action Alternative 9

 4.1.2 Truck Transportation Alternative 9

 4.1.3 Rail Transportation Alternative 9

 4.2 ROUTE/SEGMENT ALTERNATIVES 10

5.0	ENVIRONMENTAL STUDIES	10
5.1	CULTURAL RESOURCE INVENTORY	11
5.2	WETLAND AND WATERBODY INVENTORY	12
5.3	WILDLIFE INVENTORY	12
	5.3.1 Federally Protected Species Review	12
	5.3.2 Migratory Bird Treaty Act.....	16
	5.3.3 Bald and Golden Eagle Protection Act	17
5.4	TREE/SAPLING/SHRUB INVENTORY	17
5.5	NOXIOUS WEEDS INVENTORY	17
6.0	AGENCY NOTIFICATIONS AND PERMITTING	18
6.1	NORTH DAKOTA AERONAUTICS COMMISSION	24
6.2	NORTH DAKOTA ATTORNEY GENERAL	24
6.3	NORTH DAKOTA DEPARTMENT OF AGRICULTURE	24
6.4	NORTH DAKOTA DEPARTMENT OF HEALTH	25
	6.4.1 Construction Stormwater	25
	6.4.2 Hydrostatic Test Water Discharges	25
6.5	NORTH DAKOTA DEPARTMENT OF HUMAN SERVICES.....	25
6.6	NORTH DAKOTA DEPARTMENT OF LABOR AND HUMAN RIGHTS.....	25
6.7	NORTH DAKOTA DEPARTMENT OF CAREER AND TECHNICAL EDUCATION	26
6.8	NORTH DAKOTA DEPARTMENT OF COMERCE	26
6.9	NORTH DAKOTA ENERGY INFRASTRUCTURE AND IMPACT OFFICE	26
6.10	NORTH DAKOTA GAME AND FISH DEPARTMENT	26
6.11	NORTH DAKOTA INDUSTRIAL COMMISSION	27
6.12	NORTH DAKOTA OFFICE OF THE GOVERNOR.....	27
6.13	NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	27
6.14	NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICE.....	27
6.15	NORTH DAKOTA INDIAN AFFAIRS COMMISSION	27
6.16	JOB SERVICES OF NORTH DAKOTA.....	28
6.17	NORTH DAKOTA DEPARTMENT OF TRUST LANDS, SCHOOL/SURFACE TRUST	28
6.18	NORTH DAKOTA PARKS AND RECREATION DEPARTMENT	28
6.19	NATURAL RESOURCES CONSERVATION SERVICE	28
6.20	NORTH DAKOTA DEPARTMENT OF WATER resources	29
6.21	UNITED STATES DEPARTMENT OF DEFENSE	29
6.22	U.S. FISH AND WILDLIFE SERVICE NORTH DAKOTA ECOLOGICAL FIELD SERVICES OFFICE	29
	6.22.1 Endangered Species Act	30
	6.22.2 Migratory Bird Treaty Act.....	30
	6.22.3 Bald and Golden Eagle Protection Act	30
	6.22.4 Wetland and Grassland Easements	31
6.23	U.S. ARMY COPS OF ENGINEERS NORTH DAKOTA REGULATORY OFFICE	31
6.24	FEDERAL AVIATION ADMINISTRATION	32
6.25	MCKENZIE COUNTY	32
6.26	NORTH DAKOTA TRANSMISSION AUTHORITY C/O NORTH DAKOTA INDUSTRIAL COMMISSION.....	32
6.27	NORTH DAKOTA PIPELINE AUTHORITY C/O NORTH DAKOTA INDUSTRIAL COMMISSION.....	32
6.28	NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY	32
6.29	NORTH DAKOTA GEOLOGICAL SURVEY.....	33

6.30	NORTH DAKOTA FOREST SERVICE.....	33
6.31	BUREAU OF LAND MANAGEMENT, NORTH DAKOTA OFFICE	33
6.32	MILITARY AVIATION AND INSTALLATION ASSURANCE SITING CLEARINGHOUSE	33
6.33	MINOT AIR FORCE BASE (TWENTIETH AIR FORCE NINETY-FIRST MISSILE WING)	34
6.34	MINOT AIR FORCE BASE.....	34
6.35	GRAND FORKS AIR FORCE BASE	34
7.0	CRITERIA	34
7.1	EXCLUSION AREAS	34
7.1.1	Federal Resource Review	35
7.1.2	State Resource Review	35
7.1.3	County Resource Review	35
7.1.4	Areas of Critical Habitat.....	35
7.1.5	Areas where Unique or Rare Species Rare to the State Would Be Irreversibly Damaged.....	36
7.1.6	Areas within 1,200 Feet of ICBM Facility or 30 Feet of Direct Line of Launch Facility.....	36
7.2	AVOIDANCE AREAS	36
7.2.1	Federal Resource Review	37
7.2.2	State Resource Review	37
7.2.3	Historical Resources Not Designated as Exclusion/Avoidance Areas.....	37
7.2.4	Geologically Unstable Areas.....	38
7.2.5	Areas within 500 Feet of a Residence, School, or Place of Business	38
7.2.6	Reservoirs and Municipal Water Supplies.....	38
7.2.7	Water Sources for Organized Rural Water Districts	38
7.2.8	Irrigated Land.....	38
7.2.9	Areas of Recreational Significance but Not Designated Exclusion Areas.....	38
7.3	SELECTION CRITERIA	38
7.3.1	Agricultural Impacts	39
7.3.2	Sound-Sensitive Land Uses	40
7.3.3	Visual Effect on Adjacent Areas	40
7.3.4	Extractive and Storage Resources	40
7.3.5	Wetlands, Woodlands, and Wooded Areas	40
7.3.6	Radio and TV Reception and Other Communication or Electronic Facilities.....	41
7.3.7	Human Health and Safety.....	41
7.3.8	Animal Health and Safety	42
7.3.9	Plant Life.....	42
7.4	POLICY CRITERIA	42
7.4.1	Location And Design.....	42
7.4.2	Benefit For North Dakota Citizens	42
7.4.3	Training And Utilization of In-State Labor	42
7.4.4	Economies of Construction and Operation	43
7.4.5	Use of Citizen Coordinating Committees.....	43
7.4.6	Commitment of Portion of Transmitted Product For Use In State	43
7.4.7	Labor Relations	43
7.4.8	Policies And Commitments To Limit Environmental Impact	43
7.4.9	Coordination of Facilities	43
7.4.10	Monitoring Impacts	43
7.4.11	Using Existing and Proposed Rights-of-way and Corridors.....	44

7.4.12 Other Existing or Proposed Transmission Facilities44

8.0 OTHER FACTORS CONSIDERED44

8.1 PUBLIC HEALTH, WELFARE, NATURAL RESOURCES, AND THE ENVIRONMENT44

8.2 TRANSMISSION TECHNOLOGIES AND SYSTEMS DESIGNED TO MINIMIZED ADVERSE ENVIRONMENTAL EFFECTS44

8.3 BENEFICIAL USES OF WASTE ENERGY FROM A PROPOSED ENERGY CONVERSION FACILITY45

8.4 UNAVOIDABLE ADVERSE DIRECT AND INDIRECT ENVIRONMENTAL EFFECTS45

8.5 CORRIDOR OR ROUTE ALTERNATIVES DEVELOPED DURING THE HEARING THAT MINIMIZE ADVERSE EFFECTS45

8.6 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF NATURAL RESOURCES IF DESIGNATED45

8.7 DIRECT AND INDIRECT ECONOMIC IMPACTS OF THE FACILITY46

8.8 EXISTING PLANS FOR OTHER DEVELOPMENTS IN THE VICINITY46

8.9 THE EFFECT OF THE PROPOSED ROUTE ON SCENIC AREAS, HISTORIC SITES AND STRUCTURES, AND PALEONTOLOGICAL AND ARCHEOLOGICAL SITES46

8.10 THE EFFECT OF THE PROPOSED ROUTE ON AREAS THAT ARE UNIQUE BECAUSE OF BIOLOGICAL WEALTH OR BECAUSE THE SITES OR ROUTE IS A HABITAT FOR RARE AND ENDANGERED SPECIES47

8.11 PROBLEMS RAISED BY FEDERAL, STATE, AND LOCAL AGENCIES47

8.12 IMPACT ON ELECTRICAL SERVICES47

8.13 IMPACT ON EMERGENCY SERVICES47

9.0 MITIGATION MEASURES47

9.1 HUMAN ENVIRONMENT48

9.2 TERRAIN AND GEOLOGICAL RESOURCES49

9.3 SOILS49

9.4 VEGETATION AND WILDLIFE50

9.4.1 Noxious Weeds50

9.4.2 Trees and Shrubs50

9.4.3 Wetlands and Waterbodies50

9.4.4 Northern long-eared bat51

9.4.5 Whooping crane51

9.4.6 Rufa red knot51

9.4.7 Bald and Golden Eagles51

9.4.8 Migratory Bird Treaty Act51

9.5 LAND USE52

9.6 CULTURAL RESOURCES52

10.0 DEVELOPMENT53

10.1 AREAS OF KNOWN GEOLOGIC INSTABILITY53

10.2 PRESENT AND FUTURE NATURAL RESOURCE DEVELOPMENT IN THE AREA53

11.0 QUALIFICATIONS OF PREPARERS54

12.0 REFERENCES56

LIST OF TABLES

Table 2.11-1	Location and Description of Aboveground Facilities.....	4
Table 2.16-1	Location Summary	5
Table 5.2-1	Summary of Delineated Wetlands and Waterbodies.....	12
Table 5.3-1	Federally Listed Species in McKenzie County, ND	13
Table 5.5-1	State and County Listed Noxious Weeds.....	17
Table 6.0-1	Summary of Agency Notifications.....	18
Table 6.17-1	NDDTL Mineral Trust Lands within the Project Corridor	28
Table 7.1-1	Exclusion Areas	34
Table 7.2-1	Avoidance Areas.....	36

LIST OF EXHIBITS

Exhibit A	Figures and Engineering Documents
Exhibit B	Project Maps
Exhibit C	Natural Resources Survey Report
Exhibit D	Agency Consultations
Exhibit E	Landowner Waivers
Exhibit F	Project Construction Plans

REGULATORY CROSS-REFERENCE GUIDE

AUTHORITY	DESCRIPTION	SECTION(S)
CENTURY CODE – Title 49: ENERGY CONVERSION AND TRANSMISSION FACILITY		
49-22.1-06	Application for a Certificate for a Corridor	
1.a	Description of size and type of facility	1.0, 2.1
1.b	Summary of any studies of environmental impacts	5.0
1.c	Need for the facility	2.2, 2.17
1.d	Site for energy conversion facility	N/A
1.e	Preferred transmission (pipeline) corridor	2.17, Exhibits B.2-B.4
1.f	Analysis of merits and detriments of facility location	2.17, 4.1
1.g	Mitigating measures	9.0
1.h	Corridor evaluation pursuant to 49-22.1-09 and 49-22.1-03	7.0, 7.4, 8.0
1.i	Other relevant information	8.0
49-22.1-07	Application for Route Permit	
1.a	Description of size and type of facility	1.0, 2.1
1.b	Description of the location	1.0, 2.16, 2.17
1.c	Route evaluation relative to 49-22.1-09 and 49-22.1-03	7.0, 8.0
1.d	Mitigating measures	9.0
1.e	Right-of-way (ROW) preparation, construction, and reclamation	2.18
1.f	Statement identifying how: 1. Landowners informed of ROW acquisition 2. How landowners will be compensated	2.19
1.g	Other relevant information	8.0
49-22.1-09	Factors to be considered in evaluating corridor and route applications	
1	Research and investigation into effects of the project on public health, welfare, natural resources, and the environment	5.0, 7.1, 7.2, 7.3, 7.4, 8.1
2	Effects of transmission technology and design to minimize adverse effects	8.2
3	Potential beneficial uses of waste energy from energy conversion facility	8.3
4	Unavoidable adverse direct and indirect environmental effects	8.4
5	Corridor or route alternatives developed during the hearing which minimize adverse effects	8.5
6	Irreversible and irretrievable commitments of natural resources if designated	8.6
7	Direct and indirect economic impacts of the facility	8.7
8	Existing plans for other developments at or in the vicinity	8.8
9	Effect of project on scenic areas, historic sites and structures, paleontological and archaeological sites	5.1, 6.14, 7.1
10	Effect of route on unique biological areas	5.2, 5.3, 6.10, 7.1
11	Problems raised by federal, state, or local entities	6.0, 8.15, Exhibit D
ADMINISTRATIVE CODE - ARTICLE 69-06: ENERGY CONVERSION AND TRANSMISSION FACILITY SITING		
69-06-05-01	Application for a Transmission Facility Permit (Corridor Certificate)	
2.a.(1)	Type of facility proposed	1.0
2.a.(2)	Purpose of facility	2.2, 2.17
2.a.(3)	Technology to be deployed	2.5
2.a.(4)	Type of product to be transmitted	2.6
2.a.(5)	Source of product being transmitted	2.7
2.a.(6)	Final destination of product being transmitted	2.8
2.a.(7)	Size and design detail and any alternative size and design	1.0, 2.1, 4.1, 4.2, Exhibit A
2.a.(7)(a)	The width of ROW	2.9
2.a.(7)(b)	The approximate length of facility	1.3
2.a.(7)(c)	The estimated span length for electric facilities	N/A

Hiland Crude Gullickson Reroute Pipeline Project

AUTHORITY	DESCRIPTION	SECTION(S)
2.a.(7)(d)	The anticipated type of structure for electric facilities	N/A
2.a.(7)(e)	The voltage for electric facilities	N/A
2.a.(7)(f)	The requirement for and general location of any new associated facilities	2.10
2.a.(7)(g)	The estimated distance between pipeline surface structures	2.11
2.a.(7)(h)	The pipe size	1.2
2.a.(7)(i)	The maximum design for pipeline operating pressure and temperature	2.12
2.a.(7)(j)	The maximum design pipeline flow rate	2.13
2.a.(7)(k)	The number and general location of compressor or pumping stations	2.14
2.b.	Time schedule	3.0
2.b.(1)	Obtaining the certificate of corridor compatibility	3.1
2.b.(2)	Obtaining the route permit	3.2
2.b.(3)	Completing ROW acquisition	3.3
2.b.(4)	Starting construction	3.4
2.b.(5)	Completing construction	3.5
2.b.(6)	Testing operations	3.6
2.b.(7)	Commencing operations	3.7
2.c.	A copy of each evaluative study or assessment of the environmental impact of the proposed facility submitted to the agencies listed in section 69-06-01-05 and each response received	5.0, 6.0, Exhibits C and D
2.d.	Need for the facility	2.2, 2.17
2.e.	Description of alternatives	2.17, 4.0
2.f.	Corridor width	2.9
2.g.	Study area to enable the Commission to evaluate the factors in the Century Code section 49-22.1-09	5.0, 7.0
2.h.	Discussion of factors in Century Code 49-22.1-09 to aid Commission's evaluation	7.0, 8.0
2.i.	A discussion of the applicant's policies and commitments to limit the environmental impact of its facilities, including copies of the board resolutions and management directives	5.0, 7.0
2.j.	Map of criteria that led to route location	Exhibit B.1-B.4
2.k.	Discuss relative value of each criteria and how the location was selected; how operation will affect criteria	7.0
2.l.	Mitigating measures	9.0
2.m.	Qualifications of each person involved in location study	11.0
2.n.	Map identifying criteria that led to the route location and new facilities	Exhibit B.1-B.4
2.o.	8 1/2 X 11 black and white map suitable for newspaper publication	Exhibit B.5
2.p.	Discussion of present and future natural resource development in the area	10.2
2.q.	Maps and geographic information system (GIS) data meeting North Dakota Public Service Commission requirements	Exhibit B, electronic GIS data
69-06-08-02	Transmission Facility Corridor and Route Criteria	--
1	Exclusion areas	7.1
1.a.	Designated or registered national: parks, sites, landmarks, monuments, wilderness	7.1
1.b.	Designated or registered state: parks, sites, monuments, archeological sites, nature preserves	7.1
1.c.	County parks and recreational areas, municipal parks, parks owned or administered by other governmental subdivisions	7.1
1.d.	Areas of critical habitat	7.1
1.e.	Areas where unique or rare species would be irreversibly damaged	7.1
1.f.	Area within one thousand two hundred feet of Intercontinental Ballistic Missile (ICBM) facility	7.1
1.g.	Areas within thirty feet of direct line of ICBM launch facilities	7.1
2	Avoidance areas	7.2

Hiland Crude Gullickson Reroute Pipeline Project

AUTHORITY	DESCRIPTION	SECTION(S)
2.a.	Designated or registered national: historic districts, wildlife areas, wild, scenic, or recreational rivers, wildlife refuges, grasslands	7.2
2.b.	Designated or registered state: wild, scenic, recreational rivers, game refuges, game management areas, forest management lands, grasslands	7.2
2.c.	Historical resources which are not specifically designated as exclusion or avoidance areas	7.2
2.d.	Areas which are geologically unstable	7.2
2.e.	Within five hundred feet of a residence, school, or place of business	7.2
2.f.	Reservoirs and municipal water supplies	7.2
2.g.	Water sources for organized rural water districts	7.2
2.h.	Irrigated land (does not apply to underground transmission facility)	7.2
2.i.	Area of recreational significance but not designated exclusion areas	7.2
3	Selection criteria. Impact on:	7.3
3.a.(1)	Agricultural production	7.3
3.a.(2)	Family farms and ranches	7.3
3.a.(3)	Land economically suitable for irrigation	7.3
3.a.(4)	Surface drainage patterns and groundwater flow patterns	7.3
3.b.(1)	Sound sensitive land uses	7.3
3.b.(2)	Visual effect on adjacent area	7.3
3.b.(3)	Extractive and storage resources	7.3
3.b.(4)	Wetlands, woodlands, and wooded areas	7.3
3.b.(5)	Radio and TV reception and other communication or electronic facilities	7.3
3.b.(6)	Human health and safety	7.3
3.b.(7)	Animal health and safety	7.3
3.b.(8)	Plant life	7.3
4	Policy criteria	7.4
4.a.	Location and design	7.4
4.b.	Training and utilization of instate labor	7.4
4.c.	Economies of construction and operation	7.4
4.d.	Use of citizen coordinating committees	7.4
4.e.	Commitment of portion of transmitted product for use in state	7.4
4.f.	Labor relations	7.4
4.g.	Coordination of facilities	7.4
4.h.	Monitoring of impacts	7.4
4.i.	Using existing and proposed ROWs and corridors	7.4
4.j.	Other existing or proposed transmission facilities	7.4.

ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
API	American Petroleum Institute
BGEPA	Bald and Golden Eagle Protection Act
BLE	Base Level Engineering
BMP	Best Management Practice
bpd	barrels per day
CFR	Code of Federal Regulations
Commission	North Dakota Public Service Commission
County	McKenzie County
CRP	Conservation Reserve Program
CSP	Conservation Stewardship Program
EI	Environmental Inspector
EO	Executive Order
ETWS	Extra Temporary Workspace
FSA	U.S. Department of Agriculture - Farm Service Agency
GIS	geographic information system
HDD	Horizontal Directional Drilling
Hiland	Hiland Crude, LLC
ICBM	Intercontinental Ballistic Missile
IPaC	Information, Planning, and Conservation System
Kinder Morgan	Kinder Morgan, Inc.
MBTA	Migratory Bird Treaty Act
Merjent	Merjent, Inc.
NDAC	North Dakota Administrative Code
NDCC	North Dakota Century Code
NDDA	North Dakota Department of Agriculture
NDDH	North Dakota Department of Health
NDDTL	North Dakota Department of Trust Lands
NDDWR	North Dakota Department of Water Resources
NDGFD	North Dakota Game and Fish Department
NDIC	North Dakota Industrial Commission
NDPRD	North Dakota Parks and Recreation Department
NDPSC	North Dakota Public Service Commission
NDR	North Dakota Rules
NEPA	National Environmental Policy Act
NGL	Natural Gas Liquid
NPS	U.S. National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

Hiland Crude Gullickson Reroute Pipeline Project

NWP	Nationwide Permit
NWR	National Wildlife Refuge
PCN	Pre-Construction Notification
Project	Hiland Crude Gullickson Reroute Project
psig	pounds per square inch gauge
SHPO	State Historic Preservation Office
SWPPP	Stormwater Pollution Prevention Plan
UDP	Unanticipated Discoveries Plan
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOD	U.S. Department of Defense
USDOT	U.S. Department of Transportation
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WPA	Waterfowl Production Area
WQC	Water Quality Certification

INTRODUCTION

Hiland Crude, LLC (Hiland), a subsidiary of Kinder Morgan, Inc. (Kinder Morgan), owns and operates crude oil gathering and pipeline facilities in the state of North Dakota (ND). Hiland is proposing to construct and operate the Hiland Crude Gullickson Reroute Project (Project) which will include approximately 3.4 miles of eight-inch steel crude oil pipeline in McKenzie County (County), North Dakota. The Project includes pipeline inspection tool access (pig launchers and receivers) at both ends of the pipeline. This pipeline section will connect two existing eight-inch crude oil transportation pipelines as part of Hiland Crude's Market Center System.

The Project has been designed to avoid sensitive social, cultural, and environmental resources as much as possible to minimize community and natural resource impacts. The Project route has been located on private land that is primarily in agricultural use, and much of the pipeline right-of-way (ROW) has been located in or adjacent to other linear facility ROWs.

The Project is regulated by the North Dakota Public Service Commission (NDPSC), and as such, Hiland submits to the NDPSC this single consolidated application for a Certificate of Corridor Compatibility and Route Permit for the Project. The application provides the information required by:

- North Dakota Century Code (NDCC), Energy Conversion and Transmission Facility Siting Act, Chapter 49-22.1; and
- North Dakota Administrative Code (NDAC), Article 69-06, Energy Conversion and Transmission Facility Siting.

A number of additional authorizations and permit approvals are necessary prior to construction. Hiland intends to acquire all necessary permits by May 2025, commence construction on or near May 2025 and complete construction in October 2025, with an in-service date of October 2025. No winter construction is anticipated. Restoration work will commence as the Project moves forward, and Hiland anticipates complete restoration of the pipeline ROW by the end of summer 2026.

1.0 SIZE AND TYPE OF FACILITY

1.1 TYPE

The proposed Project is a crude oil transmission pipeline. The steel pipeline will meet applicable U.S. Department of Transportation (USDOT) regulations as outlined in 49 Code of Federal Regulations (CFR) Part 195.

1.2 SIZE

The Project pipeline specifications are the following:

- Eight-inch outside diameter steel pipe
 - 0.219-inch wall thickness, Grade X-52 (main line)
 - 0.322-inch wall thickness, Grade X-52 (road crossings and Horizontal Directional Drills (HDDs))
- Maximum operating pressure: 1,440 pounds per square inch gauge (psig)
- Maximum throughput: approximately 80,000 barrels per day (bpd)

- Maximum operating temperature: 100 degrees Fahrenheit (°F)
- Normal operating conditions: 70 °F at 1,000 psig

1.3 LENGTH

The Project will be approximately 3.4 miles in length. There will be a 100-foot-wide temporary workspace during construction (more at road crossings and sensitive areas) and a 50-foot-wide permanent ROW.

1.4 ABOVEGROUND FACILITIES

The Project will include two pig launcher/receiver facilities at both ends of the pipeline. The pig launcher/receivers will be installed in accordance with applicable USDOT regulations. The pig launcher and receiver facilities will facilitate the introduction of in-line tools for the performance of functions varying from cleaning to integrity monitoring. Please see Exhibit A for engineering documents.

2.0 DESIGN OF THE FACILITY

2.1 DESIGN OF PROPOSED FACILITY

The Project design includes approximately 3.4 miles of eight-inch-diameter steel pipeline and associated launchers and receivers as described in Section 1.4. Please see Exhibit A for engineering documents.

The pipeline will be manufactured according to American Petroleum Institute (API) Specifications API 5L Seamless Line Pipe and will meet International Organization for Standardization 3183 and applicable USDOT regulations outlined in 49 CFR part 195.

2.2 PURPOSE AND NEED OF THE FACILITY

The purpose of the Project is to connect two existing eight-inch crude oil transportation pipelines as part of revisions to the Hiland Crude's Market Center System. Hiland owns and operates two pipelines between the two existing valves stations; one is a 12-inch crude pipeline and one is an eight-inch refined products pipeline. Hiland plans to convert the 12-inch crude pipeline to Y-grade natural gas liquids (NGL) pipeline to facilitate transportation of NGLs to downstream markets but needs to maintain the crude pipeline connection between the two valve stations. The proposed crude pipeline project will allow Hiland to maintain the crude oil connection while reusing the existing 12-inch pipeline for NGLs (see Exhibit A for Project plans and flow diagram). Construction of the proposed Project would provide firm, reliable service of up to 80,000 barrels of crude oil per day.

Technological advances in drilling and completion associated with horizontal wells currently employed in the Bakken Shale and Three Forks formations of the Williston Basin have dramatically increased hydrocarbon production in the area. The average daily production of crude oil in North Dakota is approximately 1,200,000 bpd (North Dakota Department of Mineral Resources, 2024).

A major constraint in the production and transportation of crude oil from North Dakota to processing/distribution centers and eventual end users in the United States is the lack of pipeline capacity. To relieve the pipeline constraints, several projects have been planned to address the

growing volumes of natural gas, NGLs, and other hydrocarbons. However, pipeline capacity is not expected to keep pace with production, leaving incremental volumes to find alternative transportation methods, primarily rail or other surface transportation alternatives. Pipelines continue to be the safest method for transporting hydrocarbons, and this Project has been planned to improve the takeaway capacity for the region.

2.3 GENERAL AREA TO BE SERVED

The Project will allow for the delivery of additional crude oil from the Bakken and Three Forks production areas to facilities in the in the Mid-Continent and Gulf Coast for additional processing of the raw feedstock into commercial products prior to distribution to various markets to meet the existing need for agriculture and the petrochemical and plastics industries, as well as for refining and home heating throughout the United States.

2.4 CAPACITY

The Project will have the capacity to transport up to 80,000 bpd.

2.5 TECHNOLOGY TO BE DEPLOYED/EMPLOYED

The Project will be designed, constructed, maintained, and inspected to the USDOT Pipeline and Hazardous Materials Safety Administration regulations utilizing industry standards and company policies. The system will be monitored 24 hours a day, seven days a week, and 365 days a year by trained controls personnel. Additionally, the system is set up with a monitoring and alarm system that continuously monitors the flow and pressure of the system and readily signifies anything outside normal operating conditions.

2.6 TYPE OF PRODUCT TO BE TRANSMITTED

The Project will transport crude oil.

2.7 SOURCE OF PRODUCT TO BE TRANSMITTED

The anticipated sources of the crude oil are formations in the Williston Basin.

2.8 FINAL DESTINATION OF PRODUCT

The crude oil will be shipped out of North Dakota via the Hiland Crude Market Center pipeline system and will connect with other crude oil pipeline systems to transport the crude to facilities in the Mid-Continent and Gulf Coast for additional processing prior to distribution to various markets.

2.9 WIDTH OF RIGHT-OF-WAY

The temporary construction ROW is 100 feet wide, of which 50 feet would remain as permanent ROW.

In addition to the temporary construction ROW, extra temporary workspace (ETWS) would typically be required adjacent to crossings of roadways, railroads, waterbodies, wetlands, or other utilities, HDD pipe fabrication areas, areas requiring additional trench depth or spoil storage areas, certain pipe bend locations, locations with soil stability concerns or side slope construction, truck turnarounds or equipment passing lanes, and hydrostatic test water withdrawal and discharge

locations and water impoundment structures. Most ETWS for the Project would add 25 feet to the width of the temporary construction ROW.

Hiland will generally maintain its permanent easement along the entire length of the Project except as restricted by environmental conditions, foreign lines, and landowner agreements. The temporary and permanent ROW will be reclaimed to near its pre-existing use once construction is complete (see Exhibit A).

2.10 REQUIREMENT FOR AND GENERAL LOCATION OF ANY NEW ASSOCIATED FACILITIES

The Project will include two pig launcher/receiver facilities. The pig launcher and receiver facilities will facilitate the introduction of in-line inspection tools for the performance of functions varying from cleaning to integrity monitoring. Please see Exhibit A for engineering plans.

2.11 ESTIMATED DISTANCE BETWEEN SURFACE STRUCTURES FOR PIPELINE FACILITIES

A description of surface structures to be developed for the Project is provided in Sections 1.4 and 2.10 of this application. The location of the launcher/receiver facilities will be located at both ends of the pipeline section. Approximate locations of the launcher/receivers are identified in Table 2.11-1 below and displayed on the figures in Exhibit A.

TABLE 2.11-1				
Location and Description of Aboveground Facilities				
Type	Description	Section	Township	Range
Trap	Launcher/Receiver	4	151 North	103 West
Trap	Launcher/Receiver	33	152 North	103 West

2.12 MAXIMUM DESIGN OPERATING PRESSURE AND TEMPERATURE FOR PIPELINE FACILITIES

The maximum operating pressure for the pipeline is 1,440 psig, and the maximum operating temperature is 100 °F. Under normal operating conditions, the pipeline will operate at a summertime temperature of 70 °F and 1,000 psig.

2.13 MAXIMUM DESIGN FLOW RATE FOR PIPELINE FACILITIES

The Project could transport up to 80,000 bpd. Please see Sections 1.2 and 2.4.

2.14 NUMBER AND GENERAL LOCATION FOR COMPRESSOR OR PUMPING STATIONS

No new pumping stations will be required for this Project.

2.15 ESTIMATED TOTAL COST OF CONSTRUCTION

Hiland will invest approximately \$9.5 million in North Dakota to develop this Project. Once constructed and in service, the continued costs of maintenance and operation of the proposed pipeline are relatively minimal.

2.16 PREFERRED LOCATION OF FACILITY

The Project will be located entirely in McKenzie County, North Dakota. The circuitous pipeline route has been planned to avoid landowners who have chosen not to have this pipeline on their property.

Project location maps that depict the pipeline route are provided in Exhibit B. The Townships, Ranges, and Sections crossed by the Project Route in North Dakota are presented in Table 2.16-1 below.

TABLE 2.16-1		
Location Summary		
Township	Range	Section(s) Crossed by Route
152 North	103 West	4
152 North	103 West	29
152 North	103 West	32
152 North	103 West	33

Hiland is requesting a route construction buffer of 20 feet on each side of the designated Project Route, contingent upon not impacting an Avoidance Area without the prior approval of the NDPSC, to account for minor deviations to the designated route due to landowner concerns or constructability issues.

2.17 PREFERRED LOCATION OF CORRIDOR

Hiland and its affiliates own and operate many assets throughout the region. The operation of these assets is conducted in a manner to maximize the overall value of crude oil production, which benefits regional stakeholders (i.e., producers, landowners, royalty owners, and the State) through direct payments and tax revenues. The Project Corridor described in this application has been chosen by Hiland to avoid landowners who do not want a pipeline on their property, to utilize existing pipeline corridors, and to avoid and minimize environmental impacts. Hiland requests that the NDPSC issue a certificate for the Corridor described in this application.

Selection of the proposed Corridor and Route entailed a program which evaluated several geographic information system (GIS) data layers for the Project area. Information relative to high consequence areas (e.g., populated areas, wetlands, waterbodies, areas of cultural significance or high probability, public lands) and other unfavorable constructability or operational features were evaluated in an attempt to avoid and minimize proximity and potential impacts to these features. Features for favorable constructability or operations, such as existing ROWs (e.g., pipelines, roads, railways, power lines), were also evaluated to maximize co-location.

After selection of a preliminary location for routing the pipeline, Hiland also developed a one-mile-wide study area for analysis and agency consultation (see Section 6.0 for more detail). The shortest route that accomplished the desired impact avoidance and minimization while

maximizing collocation efforts served as the baseline for developing the proposed study area, Corridor, and Route. This baseline was then evaluated for environmental, engineering, construction, and ROW considerations for further optimization.

Hiland worked with engineering and environmental firms to further develop and refine the Route and Corridor within the study area. Environmental field surveys were conducted within an approximately 300-foot-wide survey corridor, generally centered on the pipeline route, to identify sensitive resources and to further refine the route. The Corridor described in this application follows the proposed Route along a 300-foot-wide corridor where environmental surveys were conducted. Several factors went into consideration in selecting the pipeline route, including:

- Human – choosing a route that avoids residential, commercial, and institutional landowners who do not want a pipeline on their property and ensures public safety;
- Environmental – choosing a route that minimizes disturbances to biological and cultural resources; and
- Constructability – considering terrain and obstacles such as roads, waterbodies, and other utilities to achieve safe and efficient construction.

The human factor, in particular, a landowner, is the main driver for the existing route. The shortest, most efficient route would be within the existing Hiland pipeline ROW where Hiland has two existing pipelines. However, the landowner has chosen not to allow a third pipeline within the ROW and Hiland, as a rule, prefers not to pursue eminent domain proceedings if a landowner chooses not to have a pipeline on the property. Therefore, Hiland has rerouted the pipeline around the landowner's property.

Hiland looked at both rerouting to the north and to the south of the landowner's property. Any route to the south would be longer than a northern route. Hiland chose the northern route because it is shorter and landowners have granted access for the pipeline.

To construct the northern route, some rare species habitat, tree and shrub areas, and wetland areas would be affected. Cultural resources were also identified along the northern route. Hiland is avoiding impacts as much as possible through the pipeline routing, and where environmental impacts are unavoidable, Hiland will utilize HDD.

The existing route avoids landowners who do not want a pipeline on property and is also avoiding environmental and cultural impacts as best as possible considering constructability concerns.

The location of the Project Corridor and Route is depicted on the Engineering Drawing found in Exhibit A and on the aerial maps in Exhibits B.2-B.4.

2.18 DESCRIPTION OF ROW PREPARATION AND CONSTRUCTION AND RECLAMATION PROCEDURES

Pipeline construction occurs in a linear fashion and, at any one time during the Project, any of the following activities may occur. The typical sequence of construction activities for the Project is as follows:

- Staking the workspace boundaries and utilities;
- Clearing of construction area;

- Installing temporary erosion and sediment controls;
- Grading and stump removal, if necessary;
- Segregation of topsoil, where necessary;
- Pipe delivery, bending, and welding;
- Trenching;
- Pipe installation;
- Backfilling excavations;
- Cleanup and final grading;
- Soil compaction treatment, where necessary;
- Stone removal, where necessary;
- Final restoration; and
- Upon final stabilization, removal of temporary erosion and sediment controls.

Rough and final grading includes restoring disturbed areas as near as practicable to pre-construction conditions, returning the topsoil where topsoil has been stripped, preparing a seedbed (where applicable) for permanent seeding, installing, or repairing temporary erosion and sediment control measures, repairing/replacing fences, and installing permanent erosion and sediment controls. Pre-existing landowner soil conservation improvements and structures disturbed by pipeline construction will be restored to the approximate pre-construction line and grade.

Hiland has a Revegetation Plan for the Project with procedures to be followed during the revegetation of areas disturbed as a result of construction. In areas of cultivated cropland, the land will be returned to its original land use as soon as practical following construction. Additionally, Hiland will comply with applicable permit conditions and landowner agreements.

2.19 LANDOWNER NOTIFICATION, EASEMENT ACQUISITION, AND COMPENSATION

Prior to conducting field surveys, Hiland reviewed courthouse records for the purpose of identifying current landowners along the route. Hiland contacted landowners to introduce the Project and to obtain permission to conduct surveys. Hiland has negotiated voluntary easement agreements with landowners along the Project Route which give the company the right to construct, operate, and maintain the pipeline along a specified portion or corridor of each landowner's property in return for monetary compensation. The easements contain provisions for a permanent pipeline easement with an additional temporary easement during construction. When applicable, Hiland offered additional compensation for damages resulting from pipeline construction, such as the loss of crops.

The refinement of the route includes adjustments made per landowner request. Hiland, at all times, negotiates in good faith, and necessary easement conditions and restrictions are presented and discussed.

2.20 USE OF EMINENT DOMAIN

As set forth above, Hiland has negotiated voluntary easement agreements with every landowner along the Project Route. The intention of the routing effort is to avoid landowners who choose not to have a pipeline on their property and thereby, easement agreements have been acquired. Hiland does not anticipate the need to exercise eminent domain authority for this Project.

2.21 LANDOWNER INDEMNITY PROVISIONS

Hiland's easement agreements include indemnification clauses that protect the landowner from damage caused by Hiland and its agents during construction and operation of the pipeline. The indemnity protection includes any damages caused as a result of pipeline failures or spills and includes all reasonable expenses accrued as a result of damage.

2.22 PIPELINE INSURANCE COVERAGE

For all of the facilities across Hiland's pipeline systems (Hiland Partners Holdings, LLC and Hiland Crude LLC), Hiland holds umbrella liability insurance as well as other insurance coverage for Hiland staff. Hiland's insurance also provides insured status to the State of North Dakota where contracted.

3.0 SCHEDULE

3.1 OBTAINING CERTIFICATE OF CORRIDOR COMPATIBILITY

Hiland seeks a Certificate of Corridor Compatibility by or before May 2025.

3.2 OBTAINING ROUTE PERMIT

Hiland seeks a Route Permit by or before May 2025.

3.3 COMPLETING ROW ACQUISITION

Hiland completed ROW acquisition in February 2025.

3.4 STARTING CONSTRUCTION

Hiland plans to begin construction on the Project in May of 2025, subject to receipt of all regulatory approvals and applicable permits.

3.5 COMPLETING CONSTRUCTION

Completion of construction is anticipated to occur in October 2025.

3.6 TESTING OPERATIONS

Testing of the pipeline and facilities is expected to be conducted in October 2025.

3.7 COMMENCING OPERATIONS

The in-service date for the Project is anticipated to be in February 2026.

4.0 ALTERNATIVES

4.1 ALTERNATIVES TO THE PROPOSED FACILITY

As set forth above, the Project will replace an existing 12-inch crude pipeline which Hiland plans to convert to a Y-grade NGL pipeline. During the planning process, Hiland identified and evaluated

several Project alternatives; however, none of these alternatives effectively satisfied the Project objective. These alternatives include:

- No Action Alternative;
- Trucking Transportation Alternative; and
- Rail Transportation Alternative.

4.1.1 No Action Alternative

As part of Hiland's plans to develop NGL transportation capacity from the Bakken region, Hiland will convert some of its crude oil pipeline systems to NGLs. In doing so, the crude system would have a gap in the pipelines between two segments in this area. Therefore, Hiland needs to build the proposed pipeline to keep the two segments of the crude system connected. If Hiland does not convert its existing 12-inch crude pipeline to the transportation of NGLs, the Hiland NGL transportation system will be limited or restricted. Transportation of NGLs from the Bakken benefits the producers, the County through additional tax base, downstream users of the NGLs, and it prevents the need to flare, which improves air quality in the region. For these reasons, the No Action alternative has been rejected.

4.1.2 Truck Transportation Alternative

A Trucking Transportation Alternative was reviewed and rejected due to the volume of crude that would need to be transported between the valves and the infrastructure that would need to be constructed.

The maximum daily capacity provided by the proposed Project will be equal to an estimated 80,000 barrels or 3,360,000 gallons of crude oil. The average load for a crude oil truck holds approximately 10,000 gallons. Thus, it would require 336 trucks per day to be loaded at an average of 14 trucks every hour for 24 hours a day. Similarly, it would require these 336 trucks per day to be unloaded. Along with this, transfer stations would need to be developed.

This level of truck activity is not logistically feasible, as it will cause significant amounts of heavy vehicle traffic for the area residents as well additional wear and tear on the infrastructure. The Trucking Transportation Alternative is additionally constrained by the road network in the rural area of the Project. For these reasons, Hiland rejected the Trucking Transportation Alternative.

4.1.3 Rail Transportation Alternative

A Rail Transportation Alternative was also evaluated as a surface transportation alternative. However, the lack of active railroad service within reasonable proximity to the Project's location limited the viability of this alternative. Upon further analysis, this alternative was determined not feasible due to the associated environmental impacts and financial, logistic, and time constraints necessary to acquire land and construct the requisite rail infrastructure. This alternative would also require a third-party rail operator.

A Rail Transportation Alternative would require the design and construction of rail car loading and offloading facilities, lateral service lines, and ancillary facilities necessary to support the requisite volumes of crude, requiring land acquisition and permanent conversion of agricultural land to industrial. Use of rail would require a completely different Project design than that currently proposed for the Project.

While rail tanker cars are a vital part of the short-haul distribution network for crude, pipelines are a more reliable, safe, and economical alternative for the large volumes to be transported and long distances to be covered by the Project. As such, the Rail Transportation Alternative is not considered a viable alternative and was rejected.

4.2 ROUTE/SEGMENT ALTERNATIVES

Hiland has conducted a thorough analysis of the Project Corridor. The purpose of this analysis was to confirm that the proposed Project Corridor is suitable and would cause minimal environmental impacts, thus conforming to the NDPSC siting criteria.

In conjunction with these efforts, Hiland studied routing alternatives based upon criteria as discussed in Section 2.17. A variety of routes were explored but later rejected due to a host of feasibility and landowner constraints. In support of Hiland's route selection, the desktop studies of the Project Corridor were refined and augmented with field studies along the entire length of the Project Corridor by trained natural and cultural resource specialists where landowner permission for surveys was obtained. The environmental survey was conducted across a minimum 300-foot-wide area generally centered on the proposed Route. Field crews performed these comprehensive natural and cultural resource surveys in summer and fall of 2024. The purpose of these field studies was two-fold:

- 1) to definitively identify any potential resource issues (e.g., wetlands, waterbodies, protected species, critical habitats, or cultural resources) within the Project Corridor; and
- 2) to provide the baseline field data necessary to prescribe alternative routing or mitigation, as necessary, to minimize environmental impacts.

Based upon desktop and field studies, as well as input from regulatory agencies, Hiland developed its Preferred Route. The Route begins in Section 4, Township 151N, Range 103W, moving generally north, west and then south and east, and terminates in Section 32, Township 152N, Range 103W, in McKenzie County. Hiland has chosen this Project alignment to meet landowner requests and to minimize impacts to environmental features. The Route meets the Project's objectives while conforming to the NDPSC's transmission route siting requirements. Additionally, 38.3% of the Project Route (1.29 miles) is collocated with another ROW.

The results of these field surveys are discussed in the following sections and the full Natural Resources Survey Report is contained in Exhibit C. The Cultural Resources Survey Report is privileged and not included in this application. Please see Sections 5.1 and 6.14 for a summary of the cultural resource work, results, and consultation with the North Dakota State Historic Preservation Office (SHPO).

5.0 ENVIRONMENTAL STUDIES

Hiland defined its study area as a one-mile-wide corridor generally centered on the pipeline route and conducted an initial desktop analysis for cultural resources, wetlands and waterbodies, and other sensitive environmental resources. The assessment was conducted utilizing GIS mapping, agency database review, peer-reviewed articles, and internet research. Following the desktop analysis, the appropriate agencies were consulted for cultural and biological resources (see Section 6.0).

Field studies for the Project focused on a generally 300-foot-wide environmental survey corridor, centered on the pipeline route. The survey corridor was widened in select locations to allow for flexibility in pipeline routing or in areas where extra workspace is anticipated to be required. All of the Project Corridor (as shown on the maps in Exhibits B.2 – B.4) has been surveyed for natural resources and cultural resources.

Hiland contracted specialized consultants to perform cultural, wetland and waterbody, habitat, noxious weeds, and special species assessment surveys for the Project. Additional surveys, including a tree and shrub inventory and eagle and raptor nest surveys, were also initiated and will be supplemented at the pre-construction phase, as needed.

5.1 CULTURAL RESOURCE INVENTORY

According to the North Dakota Energy Conversion and Transmission Facility Siting Act, among the “*factors to be considered [by the Commission] in evaluating applications and designation of sites, corridors, and routes,*” is the effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites. The repository in North Dakota for this information is the North Dakota SHPO, which acts as a technical resource during identification and evaluation of areas, sites, and structures and evaluates Project effects on cultural resources. The NDPSC tasks the Applicant to coordinate the identification of cultural properties, National Register eligibility evaluations, and Project effects consultation with the SHPO.

In September 2024, Hiland sponsored cultural resources investigations that completely encompass the Project Corridor and Route. Cultural resources tasks include a Class I literature review of archaeological sites and above ground historical properties; a Class III intensive cultural resources inventory with cultural resources report; and consultation with SHPO about identified resources, significance evaluations, and Project effects. The standards of the National Register of Historic Places (NRHP) are used in North Dakota to differentiate those sites for which effects are considered during Project reviews (i.e., eligible, potentially eligible, and unevaluated for inclusion on the NRHP) from those for which impacts are not considered (not eligible).

Hiland used results of the Class I review during initial project siting and has incorporated findings of the Class III survey as the Project design has progressed to avoid effect to NRHP-eligible and unevaluated properties. For non-eligible properties, Project effect does not need to be considered. In the case of eligible and unevaluated properties, effect will be avoided with the use of 50-foot buffers around the outside of site boundaries to be avoided by ground-disturbing activities. The use of barrier fencing and/or on-site archaeological monitoring is recommended at eligible and unevaluated properties to ensure site avoidance and preservation.

Hiland anticipates submitting the Project Class III cultural resources report to SHPO in January 2025. SHPO will review the inventory report, NRHP eligibility recommendations, and determine the effect of the Project on NRHP-eligible properties and currently unevaluated cultural resources. With the Project submittal, SHPO will have a 30-day review and comment period for the draft cultural resources report and documentation. Hiland anticipates SHPO concurrence on a recommendation of no historic properties affected. Hiland will continue to consult with SHPO to determine any required avoidance or preservation measures to ensure the Project will have no effect on significant cultural resources.

Details and location of cultural resources are sensitive information and considered privileged. Because of this, cultural resources are not depicted on the enclosed maps with this application,

and the Class III survey report is not included with this filing. Hiland is in active consultation with SHPO regarding the Project, and any future correspondence with SHPO will be filed with the NDPSC.

5.2 WETLAND AND WATERBODY INVENTORY

Wetland and waterbody surveys were conducted within the Project Corridor in September and October 2024. Wetland delineations were conducted pursuant to the 1987 U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (USACE, 1987), the *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region* (Version 2.0) (USACE, 2010), the *Classification of Wetland and Deepwater Habitats of the United States* (Cowardin et al., 1979), and the National Wetland Plant List (Version 3.5) (USACE, 2022). Waterbody survey methods followed the protocols set forth in the *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams* (David et al., 2022) and *The Classification of Wetland and Deepwater Habitats of the United States* (Cowardin et al., 1979).

The results of this survey can be found in the Natural Resource Survey Report provided in Exhibit C. Mapping of wetlands and waterbodies within the surveyed corridor are included in the Selection Criteria maps in Exhibit B.4. A summary of delineated features for the Route is provided in Table 5.2-1 below.

TABLE 5.2-1			
Summary of Delineated Wetlands and Waterbodies			
Component	Palustrine Emergent Wetland	Palustrine Open Water	Waterbody
Number of Delineated Features	2	0	0
Number of features crossed by: Route Centerline	1	0	0
Temporary Impacts (acres):	0.0	0.0	0.0
Permanent Impacts (acres):	0.0	0.0	0.0

Hiland will HDD under wetland resources and anticipates no wetland impact for the Project.

5.3 WILDLIFE INVENTORY

Wildlife surveys were conducted within the Project Corridor in conjunction with the wetland and waterbody delineations in September 2024. The wildlife observed are species commonly associated with agricultural communities. Details regarding the wildlife observed during field surveys are included in the Natural Resources Survey Report included in Exhibit C. Suitable habitat for one federally-listed species (Northern long-eared bat) was found within the Project Corridor (see Section 5.3.1).

5.3.1 Federally Protected Species Review

A review of the U.S. Fish and Wildlife Service (USFWS) Endangered Species Information, Planning, and Conservation System (IPaC) website (USFWS, 2018a) was conducted to determine the potential for listed species and critical habitat that may be present in McKenzie County, North Dakota. Field surveys for listed species and a general habitat assessment of the Project Corridor were conducted in the fall of 2024. Details regarding the wildlife observed during field surveys are provided in the Natural Resources Survey Report included in Exhibit C.

Suitable habitat for the northern long-eared bat was found within the Project Corridor. Hiland intends to implement construction measures to avoid impacts to the bat. Where impact may be unavoidable, Hiland will work with the USFWS to develop appropriate mitigation measures.

Due to concerns with releasing northern long-eared bat habitat locations to the public, Hiland has not included locations of suitable habitat on maps submitted to NDPSC in the NDPSC application. The maps will be submitted to NDPSC as confidential/not for public review upon request.

Table 5.3-1 provides a summary of protected species in McKenzie County. A brief description of each species and their preferred habitat is also provided below. A summary of Hiland’s consultation with USFWS with respect to federally-listed threatened and endangered species is included in Section 6.22 and in Exhibit D.

Scientific Name	Common Name	Status
<i>Myotis septentrionalis</i>	Northern long-eared bat	Endangered
<i>Charadrius melodus</i>	Piping plover	Threatened
<i>Calidris canutus rufa</i>	Rufa red knot	Threatened
<i>Grus americana</i>	Whooping crane	Endangered
<i>Hesperia dacotae</i>	Dakota skipper	Threatened
<i>Danaus plexippus</i>	Monarch butterfly	Candidate
<i>Argynnis idalia occidentalis</i>	Western regal fritillary	Proposed Threatened

5.3.1.1 Northern long-eared bat

The northern long-eared bat is a medium-sized bat of the Vespertilionidae family. The species overwinters in small crevices or cracks in hibernacula, such as caves and mines. In summer, the species roosts either singly or in colonies under loose bark or in crevices and hollows in both live trees and snags. A habitat generalist, roost tree selection appears also to be opportunistic, and the species will use a variety of tree sizes and species; however, they appear to prefer trees with a diameter at breast height of at least 3 inches. Less frequently, northern long-eared bats have been observed roosting in man-made structures such as sheds or barns. Although historically less common in the western portion of its range, northern long-eared bats occur throughout North Dakota (USFWS, 2015).

The primary threat to the northern long-eared bat is the spread of white nose syndrome; in the absence of this disease, it is unlikely the species would be suffering the dramatic population declines seen across its range (USFWS, 2015).

Northern long-eared bat was listed as endangered in 2023, and incidental take of the species is prohibited. Incidental take includes tree clearing, which will be necessary for this Project. Ten patches of potential summer roosting and foraging habitat, totaling 6.07 acres, were identified within the Project corridor. No hibernacula for overwintering are present in the Project corridor.

Construction, operation and maintenance activities associated with the Project may affect the northern long-eared bat during the roosting and foraging period. Consultations with the USFWS are ongoing. Hiland will develop conservation measures, if necessary, to avoid and/or reduce impacts to the northern long-eared bat. See Section 6.22 for a summary of consultations with

USFWS and Section 9.4 for conservation measures which will be implemented to mitigate any impacts.

5.3.1.2 Piping plover

The Piping plover is a small shore bird that nests on sandbars in rivers and sandy beaches bordering lakes and reservoirs. The Great Plains population of piping plovers are annual migrants; the species overwinters on the Gulf coast and migrates to summer nesting areas in the central U.S. and southern Canada. The species arrives in North Dakota in mid-April and remains until late August. Piping plovers utilize wide, sparsely vegetated beaches and barren river sandbars, as well as alkali wetlands in the Great Plains for nesting, foraging, sheltering, brood-rearing, and dispersal (USFWS, 2016c; 2018d).

Wetland and waterbody surveys conducted in 2024 did not identify the presence of suitable wetlands within the proposed Project workspaces (see Exhibit C). As such, no impacts on suitable habitat are anticipated.

Critical habitat has been designated for the piping plover in McKenzie County; however, the Project Corridor does not intersect with designated critical habitat for the species. Consultations with the USFWS are ongoing. Hiland will develop conservation measures, if necessary, to avoid and/or reduce impacts to the piping plover.

5.3.1.3 Rufa red knot

The rufa red knot is a large sandpiper noted for its long-distance migration between summer breeding grounds in the Arctic and wintering areas at high latitudes in the Southern Hemisphere. Some red knots wintering in the northwestern Gulf of Mexico migrate through interior North America during both spring and fall and use stopover sites in the Northern Great Plains. The species relies heavily on exposed substrate at wetland edges for stopover habitat; the suitability of a wetland for red knots depends on water levels and may vary annually (Skagen, 2006; USFWS, 2014a).

The red knot is not a resident of North Dakota; the species is an infrequent migrant during bi-annual migrations (May 15 - June 15 and July 15 - Sept 15). The number of migrating shorebirds documented in the interior can vary dramatically due to high inter-annual availability in water levels and habitat quality at mid-continental wetlands. The shoreline of the Missouri River provides stopover habitat for red knots during annual migration through North Dakota. The Project workspaces are, at the closest, 0.5 mile from the Missouri River, and the Project is not within line-of-sight of the Missouri River. As such, no impacts on suitable habitat or individuals are anticipated.

5.3.1.4 Whooping crane

Whooping cranes embark on a bi-annual migration from summer nesting and breeding grounds in Wood Buffalo National Park in northern Alberta to the barrier islands and coastal marshes of the Aransas National Wildlife Refuge (NWR) on the Gulf Coast of Texas (USFWS, 2014b). Twice yearly in the spring and fall, the cranes migrate along the Central Flyway, a migratory corridor approximately 220 miles wide and 2,400 miles in length and includes eastern Montana and portions of North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, and eastern Texas. During the migration, cranes make numerous stops, roosting in large shallow marshes, and feeding in harvested grain fields (USFWS, 2014b).

In North Dakota, the whooping crane is not present year-round; they are only present during the bi-annual migration between winter grounds and summer nesting sites (late April to June 15 and September 15 to November 15). As such, the species cannot be confirmed as present in or absent from the Project Corridor. However, the Project Corridor falls within the 95 percent migration corridor (i.e., the 220-mile band where 95 percent of all whooping crane sightings have occurred), and suitable stopover habitat (i.e., open landscape wetlands and croplands) is present in the vicinity of the Project.

Construction activities have the potential to impact individual whooping cranes. Specifically, if construction takes place during the species' migration period, human presence or noise from construction activities and equipment may cause migrating whooping cranes to startle and flush from wetlands or fields and/or to divert from the area. See Section 9.4 for conservation measures which will be implemented to reduce impacts on the whooping crane.

5.3.1.5 Dakota skipper

The Dakota skipper is a small-to-medium sized butterfly characterized by a short, sturdy body and a quick, skipping flight. The species is an obligate of high-quality prairie habitat (i.e., grasslands or discrete patches of habitat within a grassland that are predominantly native and that have not been tilled). The species can be found in both wetlands and uplands, but do not thrive in heavily grazed or cultivated areas. Adults emerge in mid-June, feeding on the nectar of flowering native forbs; harebell, wood lily, and purple coneflower are common components of their diet, and larvae of the Dakota skipper feed on grasses, favoring little bluestem; the species overwinters at the base of grasses in the soil of the site which they inhabit. In North Dakota, the skipper typically occupies both wet-mesic and dry-mesic prairie (USFWS, 2014d).

Preliminary desktop assessment of habitat within the Project area was conducted prior to field surveys and divided the habitat into two basic groups: grassland and unsuitable. The assessment identified 91.18 acres of grassland habitat within the Project area, and the field survey was conducted within these identified habitats to determine their potential suitability for Dakota skipper. Surveys were conducted in September and October 2024 by qualified surveyors within an environmental survey boundary.

The grassland areas within the Project area were identified as unsuitable habitat for the Dakota skipper. The grasslands surveyed are dominated by non-native grasses, including smooth brome (*Bromus inermis*) and crested wheatgrass (*Agropyron cristatum*).

Critical habitat has been designated for the Dakota skipper in McKenzie County; however, the Project Corridor does not intersect with designated critical habitat for the species. Due to the lack of suitable habitat and critical habitat within the Project Corridor, no impacts on suitable habitat or individuals are anticipated.

5.3.1.6 Western Regal Fritillary

The Western regal fritillary is a large, non-migratory butterfly found in grassland habitats in 14 states. Adults have orange dorsal forewings and dark hindwings that feature black bars, fine white markings, and two rows of large spots at the base of the wings. The species are strong and rapid flyers capable of moving long distances in search of nectar; however, they are dependent on connectivity between large (more than 3.86 sq miles), intact grasslands with diverse nectar sources, maintained by periodic disturbances. Adults emerge in June and are nectar generalists, feeding on the nectar of many flowering plants. Eggs are laid only once a year and hatch within 2

to 3 weeks. The larvae overwinter in nearby grassland vegetation before emerging in early spring. Larvae emerge in May and pupate in leaf litter of warm season grasses after feeding on their sole food source, violets (*Viola* spp.).

Surveys were conducted in September and October 2024 within identified grassland habitats to determine if potential suitable habitat was present within the Project area for Western regal fritillary. The field survey did not identify suitable habitat, native dominant grassland containing flowering species, within the Project area. The grasslands within the Project area were identified as unsuitable due to the dominance of non-native grasses including smooth brome and crested wheatgrass. As such, no impacts on suitable habitat or individuals are anticipated.

5.3.1.7 Monarch Butterfly

The Monarch Butterfly (*Danaus plexippus*) is a migratory insect native to North America. There are two distinct populations of Monarch Butterflies. The eastern North American population overwinters primarily in oyamel firs (*Abies religiosa*) in mountainous regions of central Mexico. The population that lives west of the Rocky Mountains overwinters primarily eucalyptus trees (*Eucalyptus* spp.), Monterey pines (*Pinus radiata*), and Monterey cypress (*Hesperocyparis macrocarpa*) in California along the Pacific Coast.

Suitable summer foraging habitat includes roadsides, prairies, meadows, old fields, and urban areas. Monarch Butterflies feed on the nectar of many flowering plants during breeding and migration. Monarch Butterfly caterpillars can only eat milkweed (*Asclepias* spp.), which limits where the adults can lay eggs. Because common milkweed (*Asclepias syriaca*) grows in a variety of habitats and disperses easily across the landscape, there are many habitats that have the potential to support the Monarch Butterfly within the Project area.

5.3.2 Migratory Bird Treaty Act

Migratory birds are protected under the Migratory Bird Treaty Act (MBTA), which prohibits the taking of any migratory bird, or a part, nest, or eggs of any such bird, except under the terms of a valid permit issued pursuant to federal regulations. Executive Order (EO) 13186 (66 Federal Register 3853) directs federal agencies to identify where unintentional take is likely to have a measurable negative effect on migratory bird populations and to avoid or minimize adverse effects on migratory birds through enhanced collaboration with the USFWS. EO 13186 states that emphasis should be placed on species of concern, priority habitats, and key risk factors, and that particular focus should be given to addressing population-level impacts.

Surveys of the Project Corridor were conducted in the summer and fall of 2024; survey results indicated the presence of habitat in the Project Corridor where migratory birds may nest. Prior to initiating pre-clearing activities and construction, Hiland will conduct environmental training for company and contractor supervisory personnel. When clearing and constructing the Project within the nesting season for migratory birds, Hiland will conduct pre-construction ground surveys to identify migratory bird nests that could be impacted by construction activities. If nests are located in the Project Corridor, Hiland will avoid nests or re-locate nests in coordination with the USFWS.

A summary of Hiland's consultation with USFWS with respect to MBTA is included in Section 6.22 and in Exhibit D.

5.3.3 Bald and Golden Eagle Protection Act

Bald and golden eagles are protected by both the MBTA and the Bald and Golden Eagle Protection Act (BGEPA). The BGEPA prohibits the take of a bald or golden eagle adults, juveniles, or chicks including their parts, nests, or eggs without a permit. Take is defined by the BGEPA as to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb. The BGEPA also addresses impacts resulting from human-induced alterations occurring around previously used nesting sites.

In the fall of 2024, no raptor nests were identified during the line-of-sight field survey.

5.4 TREE/SAPLING/SHRUB INVENTORY

During the natural resource surveys, the tree and shrub inventory documented 1,052 trees and shrubs. Green ash (*Fraxinus pennsylvanica*) was the most common species with 366 stems. Common juniper (*Juniperus communis*) was the next most common species with 164 stems. Other native species observed included Rocky Mountain juniper (*Juniperus scopulorum*), fragrant sumac (*Rhus aromatica*), water birch (*Betula occidentalis*), chokecherry (*Prunus virginiana*), silver buffaloberry (*Shepherdia argentea*), American elm (*Ulmus americana*), quaking aspen (*Populus tremuloides*), red osier dogwood (*Cornus sericea*), and eastern cottonwood (*Populus deltoides*). Two non-native species, Russian olive (*Elaeagnus angustifolia*) and Siberian elm (*Ulmus pumila*), were also documented during the surveys.

The tree and shrub inventory establishes a pre-construction status of these resources to help form the baseline for restoration and mitigation reconciliation. Hiland anticipates authorization of the Project will require all trees and shrubs that are removed to be replaced at a 2:1 ratio. Hiland will submit its tree and shrub inventory and proposed mitigation plan upon completion. See Section 9.4 for conservation measures which will be implemented to reduce impacts on trees and shrubs in the Project area.

5.5 NOXIOUS WEEDS INVENTORY

The Federal Noxious Weed Act of 1974 established a federal program to control the spread of noxious weeds. The U.S. Secretary of Agriculture was given the authority to declare plants "Noxious Weeds" and limit the interstate spread of such plants without a permit. North Dakota law (NDCC § 4.1-47-02) requires every person to do all things necessary and proper to control the spread of noxious weeds and makes it illegal for any person to distribute, sell, or offer for sale within this state a noxious weed.

The North Dakota Department of Agriculture (NDDA) lists 13 species of noxious weeds and invasive species. In addition to the NDDA noxious weed and invasive species list, localized weed boards within each county manage noxious weeds and invasive species and may develop a list of additional weeds for enforcement within their jurisdiction. McKenzie County has designated four additional species as noxious weeds (see Table 5.5-1 and Exhibit C).

TABLE 5.5-1			
State and County Listed Noxious Weeds			
Common Name	Scientific Name	State of North Dakota	McKenzie County
Absinth wormwood	<i>Artemisia absinthium</i>	X	
Baby's breath	<i>Gypsophila</i>		x
Black henbane	<i>Hyoscyamus niger</i>		x

TABLE 5.5-1			
State and County Listed Noxious Weeds			
Common Name	Scientific Name	State of North Dakota	McKenzie County
Canada thistle	<i>Cirsium arvense</i>	X	
Common burdock	<i>Arctium minus</i>		x
Dalmatian toadflax	<i>Linaria dalmatica</i>	X	
Diffuse knapweed	<i>Centaurea diffusa</i>	X	
Halogeton	<i>Halogeton glomeratus</i>		x
Houndstongue	<i>Cynoglossum officinale</i>	X	
Leafy spurge	<i>Euphorbia esula</i>	X	
Musk thistle	<i>Carduus nutans</i>	X	
Purple loosestrife	<i>Lythrum salicaria</i>	X	
Russian knapweed	<i>Acroptilon repens</i>	X	
Saltcedar	<i>Tamarix chinensis</i>	X	
Spotted knapweed	<i>Centaurea maculosa</i>	X	
Yellow toadflax	<i>Linaria vulgaris</i>	X	

Field surveys conducted in the summer of 2024 documented no areas of noxious weeds within the planned Project Corridor.

It is Hiland’s intent to minimize the potential introduction and/or spread of invasive species and noxious weeds along its construction ROW during pipeline construction activities and the revegetation timeframe. However, it is not practicable for Hiland to eradicate undesirable species that are adjacent to its ROW. Hiland will minimize the potential for the establishment of undesirable species by minimizing the time duration between final grading and permanent seeding. Hiland will also require that construction equipment be cleaned before arriving on the construction spread to prevent the introduction of undesirable species to the Project area. The McKenzie County Weed Board requires a Weed Management Plan. Hiland received approval of the Weed Management Plan on February 11, 2025 (Exhibit F).

6.0 AGENCY NOTIFICATIONS AND PERMITTING

In the early fall of 2024, Hiland initiated consultation and coordination with federal, state, and local agencies requesting input on the proposed Project Route. Letters and/or emails were submitted with accompanying maps of the Project. A summary of these consultations is provided in Table 6.0-1, and further details on each consultation are included in the following sections.

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
North Dakota Aeronautics Commission	Provides representation of the state in aviation matters and provides responsibility for the state’s aviation programs and regulatory framework.	9/25/2024	No response at this time
North Dakota Attorney General	Represents and defends the legal interests of the public.	9/25/2024	No response at this time

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
North Dakota Department of Agriculture	Fosters a healthy economic, environmental, and social climate for agriculture and the rural community through leadership, advocacy, education, regulation and other services.	9/25/2024	No response at this time
North Dakota Department of Health	Aims to improve the length and quality of life for the public.	9/25/2024	No response at this time
North Dakota Department of Human Services	Fosters positive, comprehensive outcomes by promoting economic, behavioral, and physical health, ensuring a holistic approach to individual and community well-being.	9/25/2024	No response at this time
North Dakota Department of Labor and Human Rights	Responsible for enforcing North Dakota labor and human rights laws and for educating the public about these laws. In addition, the department licenses employment agencies operating in the state and can verify the status of independent contractor relationships.	9/25/2024	No response at this time
North Dakota Department of Career and Technical Education	Works with private and public entities to provide all North Dakota citizens with the technical skills, knowledge, and attitudes necessary for successful performance in a globally competitive workplace.	9/25/2024	No response at this time
North Dakota Department of Commerce	Leads the efforts to attract, retain, and expand wealth and talent in North Dakota.	9/25/2024	No response at this time
North Dakota Energy Infrastructure & Impact Office	A Division within the Department of Trust Lands, with the goal of providing financial assistance to local units of government that are impacted by oil and gas activity.	9/25/2024	No response at this time
North Dakota Game and Fish Department	Implements stewardship of the state's fish, game, and wildlife resources. The department sets fish and game regulations, including issuance of hunting and fishing licenses and enforcement of state regulations throughout the state.	10/25/2024	11/18/2024

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
North Dakota Industrial Commission	Oversees the management of several separate programs and resources, including, the Bank of North Dakota, North Dakota Mill and Elevator, the Department of Mineral Resources, Housing Finance Agency, Building Authority, Pipeline Authority, Transmission Authority, Public Finance Authority, and Student Loan Trust.	9/25/2024	No response at this time
North Dakota Office of the Governor	Represents the current North Dakota governor, as well as the 150+ Boards and Commissions that the governor appoints.	9/25/2024	No response at this time
North Dakota Department of Transportation	Safely moves people and goods, acts as North Dakota's transportation leader, promoting safe ways, superior service, and economic growth. NDOT builds and maintains over 8,500 miles of roadway and nearly 4,900 bridges.	9/25/2024	No response at this time
North Dakota State Historic Preservation Office	The State Historic Preservation Office is implemented within the State Historical Society of North Dakota, which is under the direction of the Director who is appointed by a 12-member State Historical Board. The agency includes four departments: administration, archaeology and historic preservation, audience engagement and museum, and the state archives department. The agency oversees the cultural resources' consultation for proposed projects.	9/25/2024	10/1/2024
North Dakota Indian Affairs Commission	Acts as a liaison between the Executive Branch and the Tribes in North Dakota. Works with the Tribes and various State agencies regarding proper protocol in working with Indian people and Tribal governments.	9/25/2024	No response at this time
Job Service of North Dakota	Provides workforce and unemployment services across the state in nine Workforce Centers and at a Central location in Bismarck.	9/25/2024	No response at this time

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
North Dakota Department of Trust Lands, School/Surface Trust	Manage assets of the permanent trusts to preserve the purchasing power of the funds, maintain stable distributions to fund beneficiaries, and manage all other assets and programs entrusted in accordance with the North Dakota Constitution and applicable state law.	9/25/2024	No response at this time
North Dakota Parks and Recreation Department	Administers selected state parks and recreation areas for the state. Manages off-highway vehicle planning and safety, snowmobile safety programs and trails, Nature Preserves Act, and outdoor recreation grants and statewide recreation planning. Scope of authority and expertise covers properties protected under Section 6(f) of the Land and Water Conservation Fund, rare plants, and ecological communities established through the Natural Heritage Program.	9/25/2024	10/18/2024
Natural Resources Conservation Service	The primary private lands conservation agency within the United States Department of Agriculture. Deliver conservation solutions to assist agricultural producers with protecting natural resources.	9/25/2024	10/4/2024
North Dakota Department of Water Resources	Previously the State Water Commission. Contains the authority to investigate, plan, construct, and develop water-related projects, and serves as a mechanism to financially support those efforts throughout North Dakota.	9/25/2024	10/22/2024
United States Department of Defense	An executive branch department of the federal government of the United States charged with coordinating and supervising all agencies and functions of the U.S. government directly related to national security and the United States Armed Forces.	9/25/2024	No response at this time

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
U.S. Fish and Wildlife Service North Dakota Ecological Services Field Office	Administers several programs designed to identify and protect special status plant and animal species, critical habitats, and lands managed by the agency. Additionally, the USFWS administers National Wildlife Refuge and Waterfowl Production Areas, as well as wetland and grassland easements throughout North Dakota.	10/25/2024	11/1/2024
U.S. Army Corps of Engineers North Dakota Regulatory Office	The USACE regulates impacts to Waters of the U.S. under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act, as well as bridges, dams, dikes, or causeways over Waters of the U.S. under Section 9 of the Rivers and Harbors Act. The USACE also manages Section 408 program, reviewing projects that may alter a USACE Civil Works Project.	9/25/2024	10/10/2024
Federal Aviation Administration	Agency within the U.S. Department of Transportation which regulates civil aviation in the United States and surrounding international waters.	9/25/2024	No response at this time
McKenzie County	Contains several Departments with authority that may apply to the Project, including: <ul style="list-style-type: none"> - Floodplain, stormwater and erosion, or other local ordinances that may require reviews or permits issued through the Board of Commissioners. - Regulation of noxious weeds and noxious weed management plans. - Regulation of county-regulated drains, ditches, and/or other drainage features. - Other potential applicable ordinances or regulations. 	9/25/2024	Plan approval was received on February 11, 2025

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
North Dakota Transmission Authority c/o North Dakota Industrial Commission	The North Dakota Transmission Authority was created at the request of the North Dakota Industrial Commission, with the mission to facilitate the development of transmission infrastructure in North Dakota.	9/25/2024	9/30/2024
North Dakota Pipeline Authority c/o North Dakota Industrial Commission	The North Dakota Pipeline Authority was created at the request of the North Dakota Industrial Commission, with the mission to diversify and expand the North Dakota economy by facilitating the development of pipeline facilities to support production, transportation, and utilization of North Dakota energy-related commodities.	9/25/2024	No response at this time
North Dakota Department of Environmental Quality	Conserve and protect the quality of North Dakota's air, land, and water resources following science and law. In cooperation with the general public, industry and government at all levels, the department implements protective programs and standards to help maintain and improve environmental quality.	9/25/2024	10/24/2024
North Dakota Geological Survey	Investigates the geology of North Dakota, administers regulatory programs and acts as an advisor to other state agencies, and provides public service to the public.	9/25/2024	10/2/2024
North Dakota Forest Service	Manage, protect, and improve forest and natural resources to enhance the quality of life for present and future generations.	9/25/2024	No response at this time
Bureau of Land Management, North Dakota Field Office	Sustain the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. The North Dakota Field Office manages over 4.1 million acres of Federal and Indian Trust mineral estate in the western one-third of the state and about 58,000 acres of public land and manages approximately 2,500 Federal oil and gas leases.	9/25/2024	No response at this time

TABLE 6.0-1			
Summary of Agency Notifications ^a			
Agency	Agency Mission/Regulatory Jurisdiction	Date Submitted	Response Received
Military Aviation and Installation Assurance Siting Clearinghouse	Works to protect the Department's mission capabilities from incompatible energy development by collaborating with DOD components and external stakeholders to prevent, minimize, or mitigate adverse impacts on military training, testing, and readiness. Provide a timely, transparent, and repeatable process to evaluate potential impacts as well as explore potential mitigation options related to alternative energy production while preserving the military mission.	9/25/2024	No response at this time
Minot Air Force Base (Twentieth Airforce Ninety-first Missile Wing)	One of the Air Force's three operational missile units, allowing the wing to defend the nation with a combat-ready nuclear force. Located at the Minot Air Force Base.	9/25/2024	No response at this time
Minot Air Force Base	A U.S. Air Force Base in Ward County, North Dakota.	9/25/2024	No response at this time
Grand Forks Air Force Base	A U.S. Air Force Base in Grand Forks, North Dakota.	9/25/2024	No response at this time
^a Full copies of agency consultations are included in Exhibit D.			

6.1 NORTH DAKOTA AERONAUTICS COMMISSION

On September 25, 2024, Project notification was initiated with the North Dakota Aeronautics Commission to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.2 NORTH DAKOTA ATTORNEY GENERAL

On September 25, 2024, Project notification was initiated with the North Dakota Attorney General to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.3 NORTH DAKOTA DEPARTMENT OF AGRICULTURE

On September 25, 2024, Project notification was initiated with the NDDA to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

Lands enrolled in the U.S. Department of Agriculture (USDA)-Farm Service Agency (FSA)-administered Conservation Reserve Program (CRP) are privately owned; however, the FSA has administrative responsibilities to ensure the provisions of CRP are maintained throughout the contract period. The CRP program stipulates that lands enrolled in CRP may not have the

vegetative cover disturbed during the Primary Nesting and Brood Rearing Season (April 15 through August 1) unless disturbance of the existing cover is minimal, and a waiver of this provision is granted by the FSA.

Hiland is working with landowners directly during the easement acquisition process to identify presence of CRP enrolled lands within the Project area. Should CRP land be impacted by the Project within the Primary Nesting and Brood Season noted above, Hiland will apply for a waiver from FSA. A record of this communication can be found in Exhibit D.

6.4 NORTH DAKOTA DEPARTMENT OF HEALTH

On September 25, 2024, Project notification was initiated with the North Dakota Department of Health (NDDH) to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

The North Dakota Pollutant Discharge Elimination System (NDPDES) is the regulatory program that regulates water discharges such as construction stormwater, trench dewatering, and hydrostatic discharge permits. Hiland will procure the following NDPDES permits from the NDDH as described below.

6.4.1 Construction Stormwater

The NDDH, through their NDPDES construction stormwater program, authorizes the discharge of stormwater associated with construction activities under their general permit North Dakota Rules (NDR) 11-0000. Per the Energy Policy Act of 2005 and the remand of the U.S. Environmental Protection Agency's rule by the Ninth Circuit Court of Appeals, this Project is exempt from requiring permit coverage under NDR11-0000. However, Hiland will implement a Stormwater Pollution Prevention Plan (SWPPP, Exhibit F) to prevent pollutant runoff from the construction site to waters of the State.

6.4.2 Hydrostatic Test Water Discharges

The NDDH provides authorization to discharge water from hydrostatic testing of pipe and dewatering activities during construction under the NDPDES general permit NDG07-0000. Hiland will apply for permit coverage and comply with the requirements of NDG07-0000 for hydrostatic test discharge and dewatering activities associated with the Project. Coverage under the permit is generally granted no more than 30 days after submittal of an application. Hiland will file a copy of this permit with the NDPSC upon receipt.

6.5 NORTH DAKOTA DEPARTMENT OF HUMAN SERVICES

On September 25, 2024, Project notification was initiated with the North Dakota Department of Human Services to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.6 NORTH DAKOTA DEPARTMENT OF LABOR AND HUMAN RIGHTS

On September 25, 2024, Project notification was initiated with the North Dakota Department of Labor and Human Rights to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.7 NORTH DAKOTA DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

On September 25, 2024, Project notification was initiated with the North Dakota Department of Career and Technical Education to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.8 NORTH DAKOTA DEPARTMENT OF COMERCE

On September 25, 2024, Project notification was initiated with the North Dakota Department of Commerce to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.9 NORTH DAKOTA ENERGY INFRASTRUCTURE AND IMPACT OFFICE

On September 25, 2024, Project notification was initiated with the North Dakota Energy Infrastructure and Impact Office to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.10 NORTH DAKOTA GAME AND FISH DEPARTMENT

On October 14, 2024, Project notification was initiated with the North Dakota Game and Fish Department (NDGFD) to solicit comments on the Project. The NDGFD provided a response on November 18, 2024.

The NDGFD's response indicated their primary concern is the possible disturbance of native prairie and wooded draws. The NDGFD requested every effort be made to prevent destruction of these areas and disturbed areas be reclaimed to pre-Project conditions. The NDGFD requested appropriate precautions be taken to protect any wetlands that cannot be avoided. Lastly, the NDGFD recommended aerial surveys be conducted for raptor nests before construction begins and a 0.5-mile buffer is implemented around active eagle nest sites. A record of this communication can be found in Exhibit D.

On November 14, 2024, Hiland's environmental consultant on the Project, Merjent, organized and participated in a call with NDGFD staff to discuss the agency's recommendations. This project does not cross wooded draws; therefore, no impacts on that habitat type are expected. Merjent staff outlined Hiland's habitat surveys for Dakota skipper, a native prairie obligate, and Hiland's plans to avoid habitat for these species by routing around or boring. Through these measures, impacts on native prairie will be avoided. Merjent also relayed Hiland's plans to avoid and minimize impacts on wetlands and to consult with the USACE if wetland impacts are anticipated. Hiland conducted line-of-sight surveys for eagle nests during September 2024. No nests were observed. Hiland also plans to conduct pre-construction line-of-sight nest surveys in 2025. Nests observed during pre-construction will be avoided or re-located.

As outlined in Section 9, Hiland has already accounted for many of these concerns and has developed, or will develop, plans and procedures to address these items during construction. Hiland will continue to review work plans and procedures to incorporate NDGFD's recommendations where feasible.

6.11 NORTH DAKOTA INDUSTRIAL COMMISSION

On September 25, 2024, Project notification was initiated with the North Dakota Industrial Commission (NDIC) to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.12 NORTH DAKOTA OFFICE OF THE GOVERNOR

On September 25, 2024, Project notification was initiated with the North Dakota Office of the Governor to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.13 NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

On September 25, 2024, Project notification was initiated with the North Dakota Department of Transportation to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.14 NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICE

On September 25, 2024, Project notification was initiated with the North Dakota SHPO to solicit comments on the Project. According to the North Dakota Energy Conversion and Transmission Facility Siting Act, among the *“factors to be considered [by the Commission] in evaluating applications and designation of sites, corridors, and routes,”* is the effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites. The repository in North Dakota for this information is the SHPO, which acts as a technical resource during identification and evaluation of areas, sites, and structures and during reviews of Project effects. The NDPSC tasks the Applicant to coordinate identification and effects discussions with the SHPO. A response was received on October 1, 2024, requesting additional location information and clarification that the proposed project is a new project. Additional information was provided, and SHPO stated that the project is in the agency’s que to review. A response is pending. A record of this communication can be found in Exhibit D.

Cultural resources investigations were initiated with a Class I literature search, and a Class III pedestrian survey, including limited subsurface testing, was completed in November 2024. A draft cultural resources report will be submitted to SHPO for review and comment in January 2025. Through Project design and avoidance, Hiland anticipates SHPO concurrence with a finding that no historic properties will be affected by the Project. Following agency review, SHPO’s concurrence and/or comments will be filed with NDPSC, and Hiland will consult with SHPO to finalize any avoidance protocols or mitigation measures for historic properties or potentially historic properties located on private lands. All written correspondence between Hiland and SHPO will be submitted to the NDPSC.

6.15 NORTH DAKOTA INDIAN AFFAIRS COMMISSION

On September 25, 2024, Project notification was initiated with the North Dakota Indian Affairs Commission to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.16 JOB SERVICES OF NORTH DAKOTA

On September 25, 2024, Project notification was initiated with the Job Services of North Dakota to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.17 NORTH DAKOTA DEPARTMENT OF TRUST LANDS, SCHOOL/SURFACE TRUST

On September 25, 2024, Project notification was initiated with North Dakota Department of Trust Lands (NDDTL), School/Surface Trust to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D. Hiland is unaware of any Trust lands within the Project area.

A preliminary review of the Surface Trust Land dataset (North Dakota, 2023) concluded no School Trust Lands intersect the Project Corridor. A preliminary review of the NDDH Mineral Trust Land dataset (North Dakota, 2024) identified two State Mineral Trust Lands located within the Project Corridor, identified in Table 6.17-1 below.

TABLE 6.17-1			
NDDTL Mineral Trust Lands within the Project Corridor			
Tract ID	Township	Range	Section
2710280	152	103	31
2715450	152	103	31

6.18 NORTH DAKOTA PARKS AND RECREATION DEPARTMENT

On September 25, 2024, Project notification was initiated with the North Dakota Parks and Recreation Department (NDPRD) to solicit comments on the Project. A response was received on October 18, 2024. NDPRD stated the project does not appear to affect properties NDPRD owns, leases, or manages, or properties protected under Section 6(f) of the Land and Water Fund. In addition, A North Dakota Heritage biological conservation database query was run to determine if any current or historical plant or animal species of concern or other significant ecological community are known to occur within an approximate one-mile radius of the Project area. Based on the review, no plant or animal species of concern, or significant ecological communities were documented within or immediately adjacent to the Project site. A record of this communication can be found in Exhibit D.

6.19 NATURAL RESOURCES CONSERVATION SERVICE

On September 25, 2024, Project notification was initiated with the North Dakota Conservation Service to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

The USDA’s Natural Resources Conservation Service (NRCS) administers the Grassland Reserve Program, Wetland Reserve Program, as well as the Farm and Ranch Lands Protection Program and the Agricultural Conservation Easement Program.

Through landowner communications to date, Hiland has identified one crossing of Conservation Stewardship Program (CSP) land. The NRCS has not identified any specific requirements related to CSP land.

6.20 NORTH DAKOTA DEPARTMENT OF WATER RESOURCES

On September 25, 2024, Project notification was initiated with the North Dakota Department of Water Resources (DWR) to solicit comments on the Project. A response was received on October 21, 2024, and stated the following:

- The North Dakota DWR initial review does not suggest the project requires a conditional or temporary permit for water appropriation, but if surface water or groundwater will be diverted for construction, a permit will be required with the DWR Water Appropriate Division. Typically, Hiland will truck in water for hydrostatic testing of the pipe and/or dust control rather than appropriating water from a nearby surface or groundwater source. As such, Hiland does not expect that the Project will require a permit from the North Dakota Department of Water Resources (NDDWR). Should the scope of the Project change and a permit be required, Hiland will apply for permit coverage through the NDDWR at that time. If a permit is obtained for water appropriation, it will be filed with the NDPSC upon receipt.
- No FEMA NFIP floodplains were identified or mapped within the proposed Project area. However, flood risk throughout North Dakota has been identified via the Risk Assessment Map service and Base Level Engineering (BLE). BLE is considered the best available data and is recommended to be considered in the design process.
- The DWR Regulatory Division's Engineering and Permitting Section reviewed the Project location. If the Project does not propose to alter any watercourses and no ponds, sloughs, lakes, or other waterbodies with a drainage area of 80 acres or more are drained, then it is likely no drainage permits or construction permits for dikes, diversions, or restorations will be required. If spoil piles removed from trenches are not remediated, they may be considered dikes, which may require a construction permit

A record of this communication can be found in Exhibit D.

6.21 UNITED STATES DEPARTMENT OF DEFENSE

On September 25, 2024, Project notification was initiated with the United States Department of Defense to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.22 U.S. FISH AND WILDLIFE SERVICE NORTH DAKOTA ECOLOGICAL FIELD SERVICES OFFICE

The USFWS administers several programs designed to identify and protect special status plant and animal species, critical habitats, and lands managed by the agency, including the Endangered Species Act, MBTA, and BGEPA. Additionally, the USFWS administers NWR and Waterfowl Production Areas (WPAs), as well as wetland and grassland easements throughout North Dakota. Merjent, Inc. (Merjent) provided Hiland assistance with protected species reviews and subsequent correspondence with USFWS

On October 25, 2024, Project notification was initiated with the USFWS North Dakota Ecological Services Field Office to solicit comments on the Project, specifically requesting confirmation regarding the presence of sensitive resources or property interests that the USFWS manages in the Project corridor. A record of this communication can be found in Exhibit D. In the Project introduction letter, Hiland provided the list of federally endangered, threatened, proposed, and candidate species and critical habitat based on a review of the Project Corridor in the USFWS's online IPaC system. In the letter, Hiland also outlined its plan for surveys for habitat for piping plover, Dakota skipper, northern long-eared bat, and nests of bald eagle and golden eagle. The USFWS responded via email on November 1, 2024, stating they plan to coordinate as the Project goes through the Section 7 process with the USACE. A record of these communications can be found in Exhibit D. Merjent coordinated a call with the USFWS ND Ecological Services Field Office on November 14, 2024. During the call, Merjent summarized the Project-specific surveys for federally protected species, outlined the list of species potentially impacted, and reviewed the species-specific results of the Determination Keys. Results of this analysis are discussed in Section 5.3.1 and 9.0 of this application.

6.22.1 Endangered Species Act

Hiland reviewed the Project Corridor in the USFWS's IPaC system for federally endangered, threatened, proposed, and candidate species and critical habitat that may be present in the Project Corridor. See Sections 5.3.1 and 9.0 for results. Hiland conducted habitat surveys for whooping crane, rufa red knot, western regal fritillary, monarch butterfly, piping plover, Dakota skipper, and northern long-eared bat with the intent of avoiding areas of habitat through re-route or boring.

6.22.2 Migratory Bird Treaty Act

Migratory birds are federally protected by the MBTA, which prohibits the taking, killing, possession, and transportation of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. In North Dakota, both native prairie and non-native grasslands, forested areas, and wetlands provide breeding, nesting, foraging, brood-rearing, and dispersal habitat for many species of migratory birds. As summarized in Section 9.0, Hiland plans to conduct pre-construction surveys for migratory bird nests and to either avoid or re-locate nests that are documented within the Project, as needed, with appropriate permits.

6.22.3 Bald and Golden Eagle Protection Act

Bald and golden eagles are protected by both the MBTA and the BGEPA. The BGEPA prohibits the take of a bald or golden eagle adults, juveniles, or chicks including their parts, nests, or eggs without a permit. Take is defined by the BGEPA as to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb. BGEPA also addresses impacts resulting from human-induced alterations occurring around previously used nesting sites. Hiland conducted a line-of-sight survey for bald and golden eagle nests in September 2024; no nests were observed. As summarized in Section 9.0, Hiland also plans to conduct pre-construction line-of-sight surveys for eagle and other migratory bird nests. If eagle nests are observed within 0.5 mile of the Project Corridor, Hiland will coordinate with the USFWS on appropriate conservation measures and permits as needed.

6.22.4 Wetland and Grassland Easements

The USFWS administers NWRs and WPAs as well as wetland and grassland easements throughout North Dakota. The Project Corridor does not traverse any USFWS land, and the closest USFWS easement is approximately 12.8 miles to the north (USFWS, 2024c). In addition, the USFWS did not relay that they had lands managed by the agency within the Project Corridor during Hiland's call with them on November 14, 2024. Hiland has inquired with landowners along the route if their property contains any USFWS easements. To date, Hiland is not aware of any wetland or grassland easements that will be impacted.

6.23 U.S. ARMY CORPS OF ENGINEERS NORTH DAKOTA REGULATORY OFFICE

On September 25, 2024, Project notification was initiated with the United States Army Corps of Engineers North Dakota Regulatory Office to solicit comments on the Project. A response was received on October 10, 2024. The response letter provides a summary of the USACE jurisdiction to regulate fill material placed within Waters of the U.S. through Section 404 of the Clean Water Act, and a general statement that the Project may need a Clean Water Act Section 404 Permit. No Nationwide Permit (NWP) information or other detail was provided.

Based on a review of the wetland and waterbody data collected during field surveys (see Section 5.2 and Exhibit C), the pipeline will cross features that likely fall within the USACE's jurisdiction. Hiland expects that the Project will be eligible for coverage under the USACE NWP 12, which authorizes temporary impacts to USACE-jurisdictional waters due to construction of oil and natural gas pipeline activities, provided the pipeline can be placed without any change to pre-construction contours. Based on a review of anticipated temporary impacts to waters of the U.S., at this time, Hiland does not anticipate that the Project will trigger any of the following Pre-Construction Notification (PCN) criteria listed under the NWP conditions:

1. A Section 10 permit is required;
2. Discharges that result in the loss (i.e., permanent fill) of greater than 1/10 acre of Waters of the U.S.;
3. The proposed Project is associated with an overall project that is greater than 250 miles in length and the Project purpose is to install new pipeline along the majority of the Project length.

In addition, the Project does not trigger any PCN criteria listed under the Regional Conditions.

If a PCN is not required to be submitted, work within jurisdictional waters will be conducted in accordance with the NWP conditions, General Conditions, and the Omaha District Required BMPs. If it is determined a PCN is required, Hiland will inform the NDPSC and provide a copy of USACE's approval upon receipt.

No Section 408 Civil Works projects or other USACE-owned or managed lands were noted by the USACE.

A record of this communication can be found in Exhibit D.

6.24 FEDERAL AVIATION ADMINISTRATION

On September 25, 2024, Project notification was initiated with the Federal Aviation Administration to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.25 MCKENZIE COUNTY

On September 25, 2024, Project notification was initiated with McKenzie County to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

On December 11, 2024, Hiland's environmental consultant on the Project, Merjent, spoke with the Weed Control Officer of the McKenzie County Weed Control Board to confirm weed management requirements. The Weed Control Officer confirmed a Weed Management Plan will be required prior to construction. Hiland prepared a draft Weed Management Plan (Exhibit F) and received concurrence from the Weed Management Board on February 11, 2025.

6.26 NORTH DAKOTA TRANSMISSION AUTHORITY C/O NORTH DAKOTA INDUSTRIAL COMMISSION

On September 25, 2024, Project notification was initiated with the North Dakota Transmission Authority C/O NDIC to solicit comments on the Project. A response was received on September 30, 2024, stating there are no permit requirements or concerns from the agency. A record of this communication can be found in Exhibit D.

6.27 NORTH DAKOTA PIPELINE AUTHORITY C/O NORTH DAKOTA INDUSTRIAL COMMISSION

On September 25, 2024, Project notification was initiated with the North Dakota Pipeline Authority C/O NDIC to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.28 NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY

On September 25, 2024, Project notification was initiated with the North Dakota Department of Environmental Quality (NDDEQ) to solicit comments on the Project. A response was received on October 24, 2024. A summary of the items indicated in the letter includes:

- Ensure measures are implemented to minimize fugitive dust emissions during construction.
- Construction activity near any water of the state should be completed to minimize any adverse effects to the water, including revegetating disturbed areas as soon as possible and preventing oil and grease spills.
- Projects disturbing one or more acres must obtain a permit to discharge stormwater runoff until the site is stabilized.
- Counties and municipalities may require a stormwater permit.

- If water will be used for hydrostatic testing and will be discharged, a temporary discharge permit (NDG07-0000) will be required.
- The Project overlies the Tobacco Garden aquifer and extra care should be taken to avoid spills of materials. All spills must be reported to the NDDEQ, and remediation must be completed.
- Solid waste material must be managed and transported in accordance with the NDDEQ solid and hazardous waste rules (Division of Waste Management).
- Overall minimization for potential impact to human health and environment should be considered with the selection of the pipeline route.
- A spill response plan should be developed.

The USACE NWP's were reviewed for North Dakota, including the Regional Conditions pertaining to Section 401 Water Quality Certification (WQC) NWP 12. The Project does not cross and will not affect any Class I, IA, II and III rivers and streams, and classified lakes listed in Appendixes I and II of the State Water Quality Standards. Hiland anticipates a 401 WQC will not be required.

A record of this communication can be found in Exhibit D.

6.29 NORTH DAKOTA GEOLOGICAL SURVEY

On September 25, 2024, Project notification was initiated with the North Dakota Geological Survey to solicit comments on the Project. A response received on October 2, 2024, states the agency reviewed the proposed pipeline against the agency's landslide maps and did not note any areas of concern with the proposed route at this time. A record of this communication can be found in Exhibit D.

6.30 NORTH DAKOTA FOREST SERVICE

On September 25, 2024, Project notification was initiated with the North Dakota Forest Service to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.31 BUREAU OF LAND MANAGEMENT, NORTH DAKOTA OFFICE

On September 25, 2024, Project notification was initiated with the Bureau of Land Management (BLM), North Dakota Field Office to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.32 MILITARY AVIATION AND INSTALLATION ASSURANCE SITING CLEARINGHOUSE

On September 25, 2024, Project notification was initiated with the Military Aviation and Installation Assurance Siting Clearinghouse to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.33 MINOT AIR FORCE BASE (TWENTIETH AIR FORCE NINETY-FIRST MISSILE WING)

On September 25, 2024, Project notification was initiated with the Minot Air Force Base (Twentieth Airforce Ninety-First Missile Wing) to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.34 MINOT AIR FORCE BASE

On September 25, 2024, Project notification was initiated with the Minot Air Force Base to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

6.35 GRAND FORKS AIR FORCE BASE

On September 25, 2024, Project notification was initiated with the Grand Forks Air Force Base to solicit comments on the Project. A response is pending. A record of this communication can be found in Exhibit D.

7.0 CRITERIA

The information presented in this section was developed to demonstrate conformance with the NDPSC’s siting criteria for transmission facilities. Hiland has conducted a thorough inventory of the Project Corridor and evaluated the resources within it to assess the compatibility of the Project with the NDPSC’s siting criteria. The following sections identify and discuss the presence or absence of siting criteria within the Project Corridor and Route. Where siting criteria are identified, the location of each is shown on the maps in Exhibits B.2-B.4.

7.1 EXCLUSION AREAS

Exclusion areas are geographic areas that must be excluded in the consideration of a route for a transmission facility. A buffer zone of a reasonable width must also be included to protect the area. Table 7.1-1 and the following text identify and discuss exclusion areas within the Project Corridor.

TABLE 7.1-1				
Exclusion Areas: NDPSC Certificate of Corridor Compatibility and Route Permit				
Exclusion Area	Located within Study Area	Located within the Project Corridor	Crossed by Route	Administering Agency
National Parks	No	No	No	U.S. National Park Service (NPS)
National Memorial Parks	No	No	No	NPS
National Historic Sites and Landmarks	No	No	No	NPS
National Natural Landmarks	No	No	No	NPS
National Wilderness Areas	No	No	No	NPS; U.S. Forest Service
National Monuments	No	No	No	NPS
State Parks	No	No	No	ND Parks and Recreation Department
State Historic Sites	No	No	No	State Historical Board
State Monuments	No	No	No	State Historical Board
State Historical Markers	No	No	No	State Historical Society

TABLE 7.1-1

Exclusion Areas: NDPSC Certificate of Corridor Compatibility and Route Permit

Exclusion Area	Located within Study Area	Located within the Project Corridor	Crossed by Route	Administering Agency
State Archaeological Sites	Yes	Yes	No	State Historical Board
State Nature Preserves	No	No	No	State Park Service
County Parks and Recreation Areas, Municipal Parks, and Parks under Other Governmental Jurisdiction	No	No	No	Various
Areas Critical to the Life Stages of Threatened or Endangered Animal or Plant Species	Yes ^a	Yes ^a	No	USFWS/Various
Areas Where Animal or Plant Species Unique or Rare to the State Would be Irreversibly Damaged	Yes	No	No	USFWS/ Various
Areas within 1,200 feet of an intercontinental ballistic missile facility	No	No	No	U.S. Department of Defense (USDOD)
Areas within 30 feet of direct line of ICBM launch facility	No	No	No	USDOD

^a A small portion of Areas Critical to the Life Stages of Threatened or Endangered Animal or Plant Species is located within Study Area. Hiland has coordinated with USFWS and the NDGFD to avoid impacts. See Sections 5.3 and 6.2

7.1.1 Federal Resource Review

Review of digital data (NPS, 2024a, 2024b, 2024c, 2023a, 2023b; U.S. Geological Survey (USGS), 2024) indicates that there are no national parks, national memorial parks, national historic sites and landmarks, national natural landmarks, national wilderness areas, or national monuments located within the Project Corridor or Route. Therefore, there will be no direct impacts to national parks, historic sites, monuments, or wilderness. The nearest of these federal resources is the Fort Union Trading Posting National Historic Site, located approximately 6.5 miles to the northwest of the Project Corridor.

7.1.2 State Resource Review

Review of digital data (NDPRD, 2022; State Historical Society of North Dakota, 2024a and 2024b; USGS, 2024) indicates that there are no designated or registered state parks, state historic sites, state monuments, state historical markers, state archaeological sites, or state nature preserves within the Project Corridor or Route. The nearest of these state resources is the Fort Buford State Historic Site, located approximately 4.2 miles to the northwest of the Project Corridor.

7.1.3 County Resource Review

Review of digital data (USGS, 2024; Google Earth, 2024) indicates that there are no County Parks and Recreation Areas, Municipal Parks, or Parks under Other Governmental Jurisdiction within the Project Corridor or Route. The nearest of these county resources is Ryder Point Recreation Center, located approximately 1.3 miles to the northwest of the Project Corridor.

7.1.4 Areas of Critical Habitat

No USFWS-designated critical habitat was identified during desktop analysis of the Project Corridor (USFWS, 2024a). A small portion of USFWS-designated piping plover critical habitat is

located within the Study Area’s northern boundary, approximately 0.53 miles northwest from the Project Corridor along the Missouri River.

As described in Section 5.3 above, Hiland commissioned natural resource surveys of the Corridor. The scope of the surveys included documentation of the presence or absence of federally listed and state listed species of concern or evidence of suitable habitats for these species. The results of these field studies are detailed in Section 5.3.1 above, and planned mitigation measures are discussed in Section 9.0 of this application. Consultations with USFWS are ongoing, and formal correspondence regarding federally-listed species will be provided when received.

7.1.5 Areas where Unique or Rare Species Rare to the State Would Be Irreversibly Damaged

Based upon field surveys and agency consultations, the proposed Project will not result in irreversible impacts that are detrimental to plant and animal species or their habitats that are unique or rare to the State. The implementation of the proposed construction plans (see Section 9.0 below) and full compliance with environmental permits will fully mitigate the potential for irreversible damage.

7.1.6 Areas within 1,200 Feet of ICBM Facility or 30 Feet of Direct Line of Launch Facility

Review of digital data (United Nations Institute for Disarmament Research, 2024) shows that the Project is not within 1,200 feet of an Intercontinental Ballistic Missile (ICBM) Facility or within 30 feet of a direct line of launch facility. The nearest ICBM Facility is located approximately 42.5 miles northeast of the Project Corridor.

7.2 AVOIDANCE AREAS

Avoidance areas are geographic areas that may not be considered in the routing of a transmission facility unless it is shown there is no reasonable alternative under the circumstances. A route may contain avoidance areas; however, avoidance areas may not encompass more than 50 percent of the Project Corridor width at any point, unless there is no reasonable alternative. Table 7.2-1 and the following text identify and discuss avoidance areas within the Project Corridor.

TABLE 7.2-1				
Avoidance Areas: NDPSC Certificate of Corridor Compatibility and Route Permit				
Avoidance Area	Located within Study Area	Located within Project Corridor	Impacted by Route	Administering Agency
National Historic Districts	No	No	No	State Historic Society
National Wildlife Areas	No	No	No	U.S. Fish and Wildlife Service (USFWS)
National Wild, Scenic, or Recreational Rivers	No	No	No	Heritage Conservation Recreation Service,
NWRs	No	No	No	USFWS
National Grasslands	No	No	No	U.S. Forest Service
State Wild, Scenic, or Recreational Rivers	No	No	No	State of North Dakota Legislative Assembly
State Game Refuges	No	No	No	North Dakota Game and Fish Department (NDGFD)
State Game Management and Management Areas	Yes	No	No	NDGFD

TABLE 7.2-1

Avoidance Areas: NDPSC Certificate of Corridor Compatibility and Route Permit				
Avoidance Area	Located within Study Area	Located within Project Corridor	Impacted by Route	Administering Agency
State Forests	No	No	No	State Forest Service
State Forest Management Lands	No	No	No	State Forest Service
State Grasslands	No	No	No	State Park Service
Historical Resources not specifically designated as Exclusion or Avoidance Areas	Yes	Yes	No	State Historic Preservation Office
Geologically Unstable Areas	Yes	No	No	State Geological Survey
Within 500 Feet of a Residences, School, or Place of Business	Yes	Yes	Yes	Landowner
Reservoirs	No	No	No	U.S. Army Corps of Engineers; NDDWR
Municipal Water Supplies	No	No	No	NDDWR
Water Sources for Organized Rural Water Districts	Yes	Yes	No	NDDWR
Irrigated Land ^a	N/A	N/A	N/A	NDDWR
Areas of Recreational Significance not designated as exclusion areas	Yes	No	No	Various

^a Irrigated land does not apply to underground transmission facilities.

7.2.1 Federal Resource Review

Review of digital data (NPS, 2024d; USFWS 2024b; USFWS 2023; U.S. Forest Service (USFS), 2024; USFS, 2022; USGS, 2024) indicates that there are no designated or registered national historic districts, national wildlife areas, national wild, scenic or recreational rivers, NWRs, or national grasslands within the Project Corridor or Route. Therefore, there will be no direct impacts to these resources. The nearest of these federal resources are the Little Missouri National Grasslands, located approximately 5.7 miles to the south of the Project Corridor.

7.2.2 State Resource Review

Review of digital data (North Dakota Legislative Branch, 2017; North Dakota Forest Service, 2022; NDGFD, 2023, 2022) indicates a small portion of a State Conservation Area, the Overlook (associated with the western portion of Lake Sakakawea), is located within the Study Area’s northern boundary, approximately 0.49 miles northwest from the Project Corridor along the Missouri River. No state wild, scenic, or recreational rivers, state game refuges, state game management and management areas, state forests, state forest management lands, or state grasslands are located within the Project Corridor or Route.

7.2.3 Historical Resources Not Designated as Exclusion/Avoidance Areas

See Section 5.1 above for a discussion of historical resource desktop and field studies conducted for completion of Class I and Class III cultural resource reports and see Sections 6.1.2 and 6.9 above for a discussion of agency consultations conducted with the SHPO regarding the Project Corridor.

7.2.4 Geologically Unstable Areas

Review of digital data (North Dakota Geological Survey, 2023) indicates there are landslide deposits within the study area and Project Corridor, but these areas are not crossed by the route.

North Dakota has not experienced an earthquake of sufficient magnitude to damage steel welded pipe or structural steel structures in recorded history. Sinkholes are known to occur in the region, but these are related to subsurface mining activities as opposed to limestone dissolution. According to review of NDPSC abandoned mine data, no mining activities are located within the Project Corridor (NDPSC, 2022).

7.2.5 Areas within 500 Feet of a Residence, School, or Place of Business

Review of digital data (Federal Emergency Management Agency, 2023) displays the study area, Project Corridor, and route lie within 500 feet of residences and businesses. Hiland will obtain landowner waivers, as required.

7.2.6 Reservoirs and Municipal Water Supplies

Review of digital data (USACE, 2023; NDDEQ, 2023) has confirmed the absence of reservoirs or municipal source water protection areas for community water supply sources within the Project Corridor.

7.2.7 Water Sources for Organized Rural Water Districts

Review of digital data (North Dakota, 2021) indicates the study area, Project Corridor, and route are within an organized rural water district, the Western Area Water Supply (WAWs). The Project Corridor does not cross any mapped water pipelines.

7.2.8 Irrigated Land

Irrigated land does not apply to underground transmission facilities.

7.2.9 Areas of Recreational Significance but Not Designated Exclusion Areas

Review of digital data (USGS, 2024) indicates a small portion of a USACE Recreation Management Area, the Sakakawea Recreation Area, is located within the Study Area's northern boundary, approximately 0.49 miles north from the Project Corridor along the Missouri River. No areas of recreational significance are located within the Project Corridor or crossed by the Project Route.

7.3 SELECTION CRITERIA

NDAC 69-06-08-02(3) specifies selection criteria considered in designating a pipeline corridor or route. These criteria are used to determine whether adverse effects from the location, construction, and maintenance of the facility will be at an acceptable minimum or whether these effects will be managed and maintained at an acceptable minimum.

The selection criteria that were considered for the Project include:

- agricultural production;

- family farms and ranches;
- land suitable for irrigation;
- surface drainage and groundwater flow patterns;
- sound sensitive areas;
- visual effects;
- extractive and storage resources;
- wetlands, woodlands, and wooded areas;
- communication or electric control facilities;
- human health and safety;
- animal health and safety; and
- plant life.

Potential impacts and measures to avoid and minimize these impacts, as they relate to each of the selection criteria, are discussed in the following subsections.

7.3.1 Agricultural Impacts

7.3.1.1 Agricultural Production

The Route would temporarily affect approximately 32 acres of private land in North Dakota, of which approximately 8 acres are located on privately owned cropland (USGS, 2014). The majority of the land crossed can be characterized as either agricultural or natural vegetative cover. Once construction is complete, the land will be restored to its pre-construction contours and land use. Hiland will provide settlements to landowners for crop loss resulting from Project construction.

7.3.1.2 Family Farms and Ranches

The Route would temporarily affect approximately 32 acres of private land in North Dakota, of which approximately 16 acres are comprised of privately-owned farms and/or ranches.¹ Once construction is complete, the land will be restored to its pre-construction contours and land use. Hiland will negotiate easements with all affected landowners. The Project will have no permanent impacts to lifestyle or farm/ranch operations once construction is completed.

The location of pipeline markers is defined under 49 CFR part 195 for pipelines. Hiland works with local landowners and county officials to ensure that pipeline markers are located where required and also in an acceptable location for these parties. These markers are to be placed in full view so that they are not accidentally damaged by, nor cause damage to, landowner or county equipment.

7.3.1.3 Lands Suitable for Irrigation

This section is not applicable to buried pipelines (NDAC 69-06-08-02(2)(h)).

7.3.1.4 Surface Drainage

Standard pipeline construction techniques to be employed would not modify existing surface drainage patterns. Care will be taken throughout the construction process to minimize environmental impacts, including modification of drainage patterns. During restoration, those

¹ The acreage of privately-owned farms and/or ranches is approximated the by the sum of grassland/herbaceous and hay/pasture land use types (USGS, 2014).

areas that were disturbed during construction will be restored, the local topography will be restored to its original contours, vegetation will be re-established, and impacts will be minimal and temporary. BMPs will be implemented in accordance with the Project-specific SWPPP, which will be modeled after the NDDEQ Construction Storm Water General Permit requirements. Permanent impacts to surface drainage will be minimized to the maximum extent possible.

7.3.1.5 Ground Water

Well data has been recorded by the ND Department of Water Resources (NDDWR) for the Project Area. Well data indicates that groundwater is generally located approximately 50 to 80 feet below the surface (NDDWR, 2021). The required tie-in excavations for the proposed Project are not anticipated to reach these depths. As such, no impact to ground water is anticipated. If groundwater is encountered during construction activities, it will be dewatered in accordance with Hiland's construction plans (see Section 9.0 below) and applicable state and/or local permits.

7.3.2 Sound-Sensitive Land Uses

Temporary increases in ambient sound will occur in the areas immediately surrounding active construction. The majority of the Project is located in a rural setting away from major population centers. Construction will take place over a period of approximately six months; however, no one area will have ongoing daily activity, as construction will progress from one area of the route to the next. Construction activities at any given point along the Project are generally limited to daylight hours. The use of heavy equipment or trucks will be the primary noise generating activity during construction and excavation. The level of impact may vary by equipment type, duration of construction activity, and the distance between the noise source and the receptor. Once constructed and in-service, normal pipeline operations are not audible. Construction and operation of the Project is expected to comply with applicable noise requirements and local ordinances.

7.3.3 Visual Effect on Adjacent Areas

The proposed pipeline would include two pig launcher/receiver facilities. The facilities will be within existing fenced areas which are padlocked shut against vandalism and accidental activation. The location is clearly marked with a small placard that details ownership and contact information. The visual piping and equipment will be finished and maintained with a tan or white painted surface. These features are common throughout the landscape and are not obtrusive. The pig launcher/receiver facilities will cause only minor incremental visual impacts. No other permanent aboveground features are proposed as a part of the Project.

7.3.4 Extractive and Storage Resources

This Project will not affect any known extractive or storage resources. Impacts on future extractive development would not constitute a substantial loss of resource availability because of the narrow, linear nature of the pipeline ROW relative to the expanse of areas with resource potential.

7.3.5 Wetlands, Woodlands, and Wooded Areas

A comprehensive desktop review of published data, including aerial photography and National Wetlands Inventory data, was conducted to assess the presence or absence of wetlands, woodlands, and wooded areas. The review of the proposed Project Corridor confirmed the presence of these resources. In addition, Hiland commissioned field surveys to further identify

and record the locations of these resources along the Route. The results of these field studies will be used to implement construction measures to avoid or minimize impacts to wetlands, woodlands, and wooded areas. Land use and land cover information is shown in Exhibit B.3. The proposed mitigation is detailed in Section 9.0 of this application, and detailed survey results can be found in Exhibit C.

7.3.6 Radio and TV Reception and Other Communication or Electronic Facilities

Based on review of publicly available information (North Dakota, 2020), no radio and TV reception and other communication or electronic facilities are located within the Project Corridor; however, some of these facilities are located within the study area. The proposed Project is a buried, underground utility. No impacts on television or radio reception or communication or electronic control facilities are anticipated to occur as a result of the Project.

7.3.7 Human Health and Safety

During construction, residences and businesses in proximity to construction activities will be exposed to short-term increases in construction-related noise and dust. The construction ROW, access roads, and spoil piles near residential and commercial areas, and near farming or ranching operations, will be watered down as needed to control fugitive dust emissions during construction. Following construction, measures to stabilize and revegetate the ROW will be taken promptly to minimize further dust emissions. Heavy construction equipment required for pipeline installation will generate unavoidable short-term increases in sound levels. Increases in noise levels due to equipment operation will be limited to the period of active construction and will primarily be avoided during night-time hours (10 p.m. to 7 a.m.). Twenty-four-hour construction activities are generally limited to completing tasks that commenced during the day and where ceasing to complete could jeopardize the installation. This largely applies to some phases of HDDs, various bores, and occasional aboveground facility construction.

The USDOT's pipeline standards are published in Part 195 of Title 49 of the CFR. The regulations are intended to ensure adequate protection of the public and to prevent accidents and failures. Part 195 addresses petroleum pipeline safety issues, specifying material selection and qualification, minimum design requirements, and protection from internal, external, and atmospheric corrosion.

Actual installation of the pipeline and all construction and testing records will be subject to inspection. All pipe installed along the Project will be externally coated with a fusion bonded epoxy to resist corrosion. Once installed, internal inspections will be conducted on the pipeline at regular intervals using in-line inspection technology. The pipeline will undergo hydrostatic testing above maximum allowable operating pressure to ensure its integrity and will be placed into service only after successful completion and commissioning to verify compliance with all construction standards and requirements.

Hiland will ensure that a public education and outreach program is developed to promote public awareness of pipelines and pipeline safety in accordance with USDOT requirements. Proper signage and warnings at road and highway crossings, railroad crossings, navigable rivers, and other locations will alert the public to the presence of underground lines and provide information, contact numbers, and emergency data.

7.3.8 Animal Health and Safety

Hiland will avoid, minimize, and mitigate impacts to protected species to the maximum extent practicable. Hiland is continuing to consult with agencies regarding protected species (see Sections 5.3.1, 6.1.1 and 6.2 above). Impacts to the majority of animal species will be short-term and temporary, and the construction workspace will be restored to its pre-construction conditions following installation of the pipe.

7.3.9 Plant Life

Field surveys conducted for the Project did not identify any critical habitat within the Project Corridor (see Exhibit C). All areas disturbed by construction of the Project will be revegetated in accordance with applicable agency standards and landowner requests. In addition, Hiland will complete tree and shrub mitigation per NDPSC guidelines.

7.4 POLICY CRITERIA

7.4.1 Location And Design

The Project facilities are being sited in accordance with the North Dakota Energy Conversion and Transmission Facility Siting Act (NDCC chapter 49-22.1). Efforts to avoid and minimize environmental and human impacts are ongoing. Additionally, discussions with landowners regarding placement of the pipeline on respective tracts are taking place.

Facilities will be constructed and operated according to all applicable regulations. The Project will meet or exceed state and federal safety requirements and will be designed in accordance with 49 CFR part 195. All persons and firms providing service to Hiland are required to conduct their work in compliance with environmental conditions, permit authorizations, and applicable regulations and will be held accountable for their actions.

7.4.2 Benefit For North Dakota Citizens

The intention of the Project is to replace the existing 12-inch crude line with the proposed 8-inch pipeline, which allows for the reuse of the 12-inch pipeline for NGL transportation. There are significant benefits for North Dakota residents in opening the door for NGL transportation while maintaining crude flow. Labor will be required for construction and operation of the pipeline as mentioned in Section 7.4.3. Construction of the pipeline not only provides temporary construction opportunities for local workers, but it will also provide revenue for local service providers such as restaurants and hotels. Operation of the pipeline will create new jobs. The pipeline itself will generate easement income for the landowners and will generate taxes for the County as mentioned in section 7.4.4.

North Dakota oil and gas producers will also benefit from selling the NGLs rather than flaring the resource. Additionally, part of the benefit of collecting the NGLs rather than flaring is the reduction of air quality impacts. For several years, North Dakota has worked to reduce flaring and has made significant progress. This pipeline will add to the reduction of NGL flaring in the region and will incrementally reduce air pollution and greenhouse gas impacts.

7.4.3 Training And Utilization of In-State Labor

Construction of the Project will require at least 60 workers.

7.4.4 Economies of Construction and Operation

This Project will be an additional North Dakota asset for Hiland. In 2023, Hiland paid ad valorem tax in excess of \$606,000 for its existing infrastructure in the State. Once constructed and in-service, the continued costs of maintenance and operation of the Project are minimal.

7.4.5 Use of Citizen Coordinating Committees

Hiland has established and maintains a good relationship with the local residents through its long-term regional presence operating various assets in the area. Through these relationships, Hiland has maintained several grassroots communication channels to inform local residents regarding the developments associated with the Project. Hiland will continue to maintain contact with local government officials. Through these contacts, Project-related information will be exchanged, and should concerns arise, Hiland, Inc. will work with officials to resolve those issues.

7.4.6 Commitment of Portion of Transmitted Product For Use In State

The proposed Project will maintain transportation of crude oil while improving transportation of NGLs from the Bakken to markets in the Mid-Continent and Gulf Coast. There are no plans for direct in-state use of the NGLs.

7.4.7 Labor Relations

Hiland maintains positive labor relations with its staff and contract work force and does not anticipate encountering any adverse labor relations on this Project. Hiland is an equal opportunity employer committed to diversity and inclusion. Additionally, the labor market in the region is generally supportive of the oil and gas industry.

7.4.8 Policies And Commitments To Limit Environmental Impact

Hiland is committed to protecting the environment during all phases of construction of the Project. Before construction, environmental field surveys of the pipeline route were conducted to identify wetlands, streams, threatened and endangered species and their habitat, cultural resources, agricultural or forested areas, and special land-use designations. In consultation with state and federal agencies, Hiland developed mitigation plans to protect these sensitive areas during and after construction. Once the Project is operational, ongoing monitoring and maintenance activities will be implemented to ensure the safe operation of the pipeline.

7.4.9 Coordination of Facilities

This Project will facilitate the effective transportation of both crude and NGLs, using as much of the existing Hiland infrastructure as possible. Hiland will provide opportunities for third parties to tie into either of the pipeline systems.

7.4.10 Monitoring Impacts

Hiland has established and maintained positive landowner and community relationships throughout the region through its open communication and commitment to corporate citizenship standards that are based on integrity. Hiland monitors landowner concerns through its ROW department and responds to all reasonable requests. In a similar manner, Hiland monitors community concerns and responds to all reasonable concerns brought to its attention by local

community leaders. Hiland will select a qualified contractor for construction of the Project and will coordinate the oversight responsibilities for construction activities with this contractor throughout the Project. Environmental responsibilities will be coordinated in the same manner.

During operation, pipeline control personnel provide 24-hour electronic surveillance of Hiland pipeline operations. In addition, Hiland uses a number of inspection methods and processes to mitigate corrosion and minimize the potential for third-party damage to the pipelines. These include regular ROW patrols, inspections of cathodic protection equipment, and coordination with the North Dakota One-Call Center to mark the pipeline or to be present during excavation to ensure the public's safety and the integrity of the pipeline.

Hiland designs, constructs, operates, and maintains its pipeline systems to ensure safety and reliability. If a leak were detected, the company is able to stop the flow of product remotely from its control center. Hiland continues to establish and maintain contact with appropriate fire, police, and other public officials. This communication establishes the responsibility and resources of each government organization that may respond to a pipeline emergency. Hiland also acquaints officials with the abilities of the pipeline operator when responding to an emergency. In all cases, emergency responders are directed to protect people first, then the environment next, and then property.

7.4.11 Using Existing and Proposed Rights-of-way and Corridors

Hiland selected the Project alignment to maximize the use of existing utility corridors. Of the 3.4 miles of the Route, 38.3 percent (1.29 miles) will be collocated with existing pipeline corridors.

7.4.12 Other Existing or Proposed Transmission Facilities

Hiland's assets, mostly fee based, consist of crude oil gathering and transportation pipelines and natural gas gathering and processing systems, primarily serving production from the Bakken Formation in North Dakota and Montana. Hiland has owned and operated hydrocarbon pipelines since 2004.

8.0 OTHER FACTORS CONSIDERED

8.1 PUBLIC HEALTH, WELFARE, NATURAL RESOURCES, AND THE ENVIRONMENT

Please see Sections 5.0, 7.1, 7.2, 7.3, and 7.4.

8.2 TRANSMISSION TECHNOLOGIES AND SYSTEMS DESIGNED TO MINIMIZED ADVERSE ENVIRONMENTAL EFFECTS

The Project design is consistent with existing pipeline technologies. A variety of measures will be taken to avoid, minimize, or mitigate impacts to sensitive resources, including implementing trenchless construction (i.e., HDD and bores), narrowing ROW widths, rerouting, route deviations, etc. Trenchless techniques avoid the need for open cut trenches, thereby minimizing environmental impacts and eliminating ground-level surface hazards in sensitive areas along the route. BMPs will be used to minimize impacts from clearing, trenching, and reclamation of the construction ROW. Potential impacts to environmentally sensitive areas will be either avoided through rerouting, HDD/bore, or by protecting sites during construction.

Hiland's Construction Standards Section C1260 prescribes construction techniques and mitigation measures that will be employed to minimize the effects of construction on environmental resources and is available upon request. Mitigation measures are also discussed in Section 9 of this application.

8.3 BENEFICIAL USES OF WASTE ENERGY FROM A PROPOSED ENERGY CONVERSION FACILITY

The Project does not involve new energy conversion facilities; as such, the potential for beneficial uses of waste energy from a proposed energy conversion facility does not apply to the Project.

8.4 UNAVOIDABLE ADVERSE DIRECT AND INDIRECT ENVIRONMENTAL EFFECTS

Unavoidable adverse direct and indirect environment effects will be temporary, short-term, and will be minimized to the extent practicable. The Project will be co-located and run parallel to existing infrastructure (e.g., pipelines, utility corridors, railway, etc.) to the maximum extent possible. Hiland will implement measures to mitigate potential impacts to resources such as vegetation, wildlife, agricultural, transportation, and noise levels. Please see Section 9.0 for a complete description of mitigation measures.

8.5 CORRIDOR OR ROUTE ALTERNATIVES DEVELOPED DURING THE HEARING THAT MINIMIZE ADVERSE EFFECTS

A description of the alternatives analyzed in the design of the Project is presented in Section 4.0 of this application. The Project Corridor and Route have been designed based on landowner engagement, stakeholder outreach, civil surveys, environmental surveys, and constructability analysis, among other considerations. Reroutes of varying lengths and for a variety of reasons have been made to minimize adverse effects to sensitive areas. Hiland will continue to adjust the Route based on additional constructability concerns and necessary feature avoidance. Hiland will participate in the hearing process and will address any alternatives developed during the process, as applicable.

8.6 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF NATURAL RESOURCES IF DESIGNATED

The Project was designed to co-locate the pipeline within existing linear infrastructure (i.e., pipeline, utility, road, and railroad corridor) to the maximum extent practicable. This design minimizes irreversible or irretrievable commitments of natural resources due to conversion of greenfield to industrial uses and optimizes existing fragmentation. Generally, all areas impacted by pipeline construction (except for aboveground facilities) will return to previous land use.

Long-term vegetation impacts will result from converting wooded areas to herbaceous/scrub shrub areas to comply with federal pipeline regulations, ensure safety and integrity of the pipeline, and facilitate routing aerial inspections. Hiland will replace trees and shrubs that must be removed for construction and safe operation of the pipeline on a 2:1 ratio in accordance with the NDPSC requirements.

The Project will not result in an irreversible and irretrievable commitment of natural resources.

8.7 DIRECT AND INDIRECT ECONOMIC IMPACTS OF THE FACILITY

Estimated total spending for construction of the Project is \$9.5 million. This estimate includes construction of the pipeline, engineering, real estate services, easement payments, mitigation payments, and other support services. Construction outputs for the Project include employment, labor income, and production spending. The Project is expected to employ at least 60 workers for construction of the Project. These economic impacts will be realized during construction in 2025 and throughout operations and maintenance annually starting in 2025.

North Dakota imposes taxes on sales, use, gross receipts and lodging, and individual income. Local governments may impose taxes on the same tax bases; however, most unincorporated areas do not impose local option sales taxes. The Project will contribute directly and indirectly to tax bases at the state and local levels.

Construction of this Project would provide firm, reliable service for an additional 80,000 bpd of crude oil and provide a critical transportation link in the Hiland Crude Market Center System for delivery to facilities in the Mid-Continent and Gulf Coast for additional processing prior to distribution to various markets.

8.8 EXISTING PLANS FOR OTHER DEVELOPMENTS IN THE VICINITY

Hiland is one of the largest operators in North Dakota, producing, gathering, treating, processing, and transporting crude oil, NGLs and natural gas. Other current Hiland development includes a 28.7 mile NGL pipeline (Spine Project) located in McKenzie County which will be separately submitted for PSC review.

In addition, Hiland is aware of several other current or foreseeable projects in McKenzie County, North Dakota, undergoing National Environmental Policy Act (NEPA) review, or applications are being developed to meet state permitting requirements. These projects include three new NGL pipelines, two crude oil gathering lines, one fiber optic cable, two pipeline conversion projects (minimal new construction), three natural gas processing plants or plant expansions, and one residential subdivision outside of Watford City. In addition, according to the NDIC – Oil and Gas Division (NDIC, 2018), there are 15 active drilling rigs in McKenzie County, and there are seven pending well pad or well pad/expansions proposed on the Little Missouri National Grassland.

Based on a review of the scope and location of present and foreseeable projects, Hiland has concluded that this Project is not in conflict with any known or proposed developments planned in the area.

8.9 THE EFFECT OF THE PROPOSED ROUTE ON SCENIC AREAS, HISTORIC SITES AND STRUCTURES, AND PALEONTOLOGICAL AND ARCHEOLOGICAL SITES

Hiland has consulted with the NDPRD and the NDSHPO and found that scenic areas and paleontological sites are not found within the Project corridor. Further, Hiland has researched State records and conducted cultural resource surveys to identify historic and archeological resources and has designed the route to avoid impacts to historic sites and structures and archeological sites. Please refer to Sections 5.1, 6.14, 7.2.3, 7.3.3, and 9.6 for more avoidance measure detail.

8.10 THE EFFECT OF THE PROPOSED ROUTE ON AREAS THAT ARE UNIQUE BECAUSE OF BIOLOGICAL WEALTH OR BECAUSE THE SITES OR ROUTE IS A HABITAT FOR RARE AND ENDANGERED SPECIES

Hiland has consulted with the USFWS and the NDGFD and conducted biological surveys to identify unique, rare, and endangered plant and animal species. Hiland has developed avoidance plans in coordination with the USFWS and the NDGFD and no adverse impacts are anticipated. Please refer to Sections 5.3, 5.4, 5.5, 6.10, 6.22, 7.1.4, 7.1.5, 8.1, and 9.4 for more avoidance measure detail.

8.11 PROBLEMS RAISED BY FEDERAL, STATE, AND LOCAL AGENCIES

Hiland provided Project-specific notification to various federal, state, and local agencies. Through this notification process, these agencies have the opportunity to identify possible sensitive environmental resources within the study area and any related agency concerns. Section 6 of this application summarizes the consultations that have taken place to date. Hiland is actively working with federal, state, and local agencies and will address problems that are raised. A complete record of these agency communications is provided in Exhibit D.

8.12 IMPACT ON ELECTRICAL SERVICES

For the operation of the pipeline, power needs will be limited to the pig launcher /receiver sites at either end of the pipeline. The draw on the electrical grid will be infrequent and, when needed, will be very small. Hiland has located the valves adjacent to existing power facilities to avoid the need to install new power lines.

8.13 IMPACT ON EMERGENCY SERVICES

A number of types of emergencies can occur when constructing and operating an NGL pipeline, from personnel injuries to pipeline failures. Hiland has safely operated crude, natural gas, and NGL pipelines in this area for over 14 years, has developed a strong relationship with emergency service providers in the region, and has a solid safety record. The absence of significant safety issues is a result of Hiland's staff diligence in constructing and operating the pipelines in a safe manner over the years.

During the construction phase, Hiland has a number of safety precautions that are outlined in Hiland's Construction Standards C1260, including measures to protect landowners, construction staff, property, and the environment. Each of the construction staff will go through safety training, and there will be daily 'tailgate' safety meetings. It is anticipated that this will minimize safety incidents and impacts to Emergency Services. For operation of the pipeline, Hiland's pipeline operators receive safety and emergency response training. All of the operators are well-versed in the Hiland Emergency Response Plan as well as the SPCC Plan and are trained to respond to emergencies. Emergency response planning and training includes coordination with local and State Emergency Services.

9.0 MITIGATION MEASURES

Hiland has developed several Project control documents that will be utilized during construction activities to minimize and mitigate impacts to environmental resources (see Exhibit F). These plans will be incorporated into contract documents and enforced by Hiland:

- Construction Standards C1260-Environmental Requirements
 - Comprehensive control document that describes general mitigation measures related to erosion and sedimentation, upland construction techniques, stream/wetland crossings, dewatering and hydrostatic testing, dust control, waste management, and revegetation.
- Weed Management Plan
 - Outlines methods to control state- and county-listed noxious weeds. Hiland received Plan approval from the McKenzie County Weed Management Board on February 11, 2025 (Exhibit F).
- Spill Prevention, Control and Countermeasure Plan
 - Provides control measures to prevent hazardous materials spills and measures to control and clean up any spills that may occur.
- HDD Inadvertent Return Mitigation Plan
 - Provides measures to minimize the potential for release of drilling mud during HDD operations. Establishes procedures and responsibilities for containment/cleanup in the event of an inadvertent release.
- Unanticipated Discoveries Plan (UDP)
 - Provides response measures to be followed in the event of a discovery of cultural resources or human remains.
- Weed Management Plan
 - Outlines methods to control state- and county-listed noxious weeds. Hiland received Plan approval from the Mackenzie County Weed Management Board on February 11, 2025.

The plans, as they relate to specific resources, are referenced in the following sections. In addition to these plans, the Project will be subject to permits from various federal, state, and local agencies (environmental permits are discussed in Section 6.0). To further ensure compliance with permits, plans, obligations, and commitments, Hiland will employ one or more Environmental Inspectors (EI) during the Project. The EI(s) will be responsible for monitoring construction activities and will provide daily reports to Hiland staff.

9.1 HUMAN ENVIRONMENT

Hiland will require its construction contractor to clean up, on a daily basis, all personal litter, bottles, and paper deposited by ROW preparation and construction crews. Waste and scrap that is the product of pipeline construction will be removed and properly disposed of in accordance with applicable regulations before construction is completed. To the maximum extent practicable, Hiland will minimize noise and dust resulting from construction near residential areas and farming and ranching operations.

Paved roads will be bored; therefore, use of these facilities will not be disrupted as a result of the Project. Gravel roads will be open cut or bored. Open cutting a road will temporarily close it to traffic; however, the road network throughout the Project Area is sufficient that suitable alternative routes are readily available to prevent any significant delays in traffic. Furthermore, the trench can be plated to allow for traffic crossing when construction is not active (i.e., after the end of the workday).

Hiland will obtain applicable permits prior to conducting road crossings. Temporary signs will be posted at each crossing as appropriate to alert motorists to construction activity. Paved roads and railroads will be bored, which will minimize interference with traffic flow caused by construction activities.

As noted above, Hiland has developed, or is in the process of developing, several Project control plans, which will be utilized during construction activities to minimize and mitigation impacts.

9.2 TERRAIN AND GEOLOGICAL RESOURCES

Hiland will, to the maximum extent practicable, restore the area affected by pipeline construction to its pre-construction condition. Restoration will be compatible with the safe operation, maintenance, and inspection of the pipeline. Measures such as slope breakers, erosion control blankets, and re-vegetation will be employed to maintain the stability of slopes along the ROW. No crown of backfill material will be left over the trench in wetlands.

9.3 SOILS

Pipeline construction activities, such as clearing, grading, trench excavation, backfilling, and movement of construction equipment along the ROW, may result in impacts on soil. Clearing removes protective cover and exposes soil to the effects of wind and precipitation, which may increase the potential for soil erosion and movement of sediments into sensitive environmental areas. Grading and equipment traffic may compact soil, reducing porosity and percolation rates, which could result in increased runoff potential. Trench excavation and backfilling could lead to a mixing of topsoil and subsoil and may introduce rocks to the soil surface from deeper soil horizons.

Hiland will minimize or avoid these impacts to soils by implementing the mitigation measures described in its Construction Standards C1260-Environmental Requirements. These Environmental Requirements will be included in contract documents and enforced throughout the duration of the Project. Temporary erosion and sedimentation control measures may include installation of silt fence, straw bales, slope breakers, trench breakers, erosion control fabric, and mulch.

To minimize potential impacts to soil productivity, topsoil will be segregated during trench excavation in agricultural land, unsaturated wetlands, and if applicable, other areas where soil productivity is an important consideration. Unless otherwise requested by the landowner, topsoil in cropland will be removed to a maximum depth of 12 inches from the trench and spoil storage area and stored separately from the trench spoil. After the trench is backfilled, topsoil will be returned to its approximate original location in the soil horizon.

Compaction of agricultural soils will be minimized by restricting construction activities during periods of prolonged rainfall. Where unacceptable levels of compaction occur in agricultural lands, a chisel plow or other deep tillage equipment will be utilized to loosen the soil during restoration.

Hiland will retain EIs to monitor the contractor's compliance with applicable requirements to protect soil resources during construction of the Project.

Recognizing the unique terrain and soils within portions of the Project Corridor, Hiland may commission additional studies to assist in Project planning. Pending final construction design, geotechnical investigations will be initiated at certain HDD locations to assist in planning the set-up, profile, and completion of boring efforts and to minimize risk for unexpected conditions during construction. The results of these studies will be incorporated into the final Project plans and specifications.

9.4 VEGETATION AND WILDLIFE

Hiland will clear the ROW to the extent necessary to assure suitable access for construction, safe operation, and maintenance of the pipeline. In areas that require permanent revegetation, Hiland will specify appropriate seed mixes, application rates, and seeding dates, taking into account recommendations of appropriate state and federal agencies and landowner requests. In non-agricultural areas, vegetation cleared from extra workspace will be allowed to revegetate naturally after construction depending on arrangements with the landowner. Consequently, significant changes in cover types are not anticipated.

Hiland will take appropriate precautions to protect livestock and crops from being affected by construction. Operation of the proposed pipeline is not anticipated to significantly affect terrestrial wildlife, fisheries resources, or other aquatic species. Shelter belts and trees will be protected and restored by Hiland to the extent practicable in a manner compatible with the safe operation, maintenance, and inspection of the pipeline.

9.4.1 Noxious Weeds

The Project Corridor did not intersect any noxious weed patches. Hiland will comply with its Weed Management Plan, which was approved by the McKenzie County Weed Management Board (Exhibit F).

9.4.2 Trees and Shrubs

Hiland will comply with the NDPSC's tree and shrub mitigation specifications. A formal tree and shrub inventory was conducted, which identified 1,052 trees and shrubs in the Project area. The clearing or removal of trees or shrubs will be done selectively and minimally, in a manner that minimizes the disturbance to woody vegetation and in compliance with NDPSC's specifications. The replacement of trees and shrubs will be based upon actual impacts due to construction, will meet the 2:1 ratio specified, and will be fully documented. Hiland will submit a tree and shrub mitigation plan upon route and construction method finalization.

9.4.3 Wetlands and Waterbodies

Hiland will minimize impacts to wetland and waterbodies by minimizing workspace through these features and by utilizing low impact crossing methods, such as HDD, where appropriate. Furthermore, Hiland will conduct all regulated crossings in compliance with the USACE NWP 12. After completion of waterbody crossings, Hiland will revegetate disturbed stream banks in accordance with the Hiland Construction Standards C1260 Environmental Requirements technical document and requirements of applicable state or federal permits. During construction in unsaturated wetlands, topsoil will be segregated from the trench line to preserve natural

sources of seed and rootstock. After the trench is backfilled, the topsoil will be replaced to facilitate the natural revegetation process. Wetlands and waterbodies will be returned to their pre-construction condition and contours following construction.

9.4.4 Northern long-eared bat

Suitable habitat for northern long-eared bat is present in the Project Corridor. Hiland plans to avoid most of these areas, although a small amount of tree clearing is anticipated.

9.4.5 Whooping crane

If a whooping crane is sighted within the construction corridor, or if the USFWS notifies Hiland of a whooping crane sighting within one mile of the construction ROW, Hiland would suspend construction activities, and work would not resume until the birds have left the area. Any whooping crane sightings would be immediately reported to the USFWS and the NDGFD. As part of pre-construction activities, Hiland would conduct environmental training with contractors and construction crews, providing them information on proper identification of the species and the correct procedures to follow regarding a sighting. If a whooping crane is spotted within one mile of construction, Hiland will stop construction and immediately notify the USFWS North Dakota Ecological Service Office. In addition, to avoid long-term impacts on whooping crane migratory stopover habitat, wetlands that are crossed by the Project would be restored to pre-construction contours. With these conservation measures in place, Project activities are not anticipated to have adverse impacts on the whooping crane.

Consultations with the USFWS are ongoing. Hiland will develop further conservation measures, if necessary, to avoid and/or reduce impacts to the whooping crane.

9.4.6 Rufa red knot

To avoid long-term impacts on the red knot's migratory stopover habitat, wetlands crossed by the Project would be restored to pre-construction contours. With this conservation measure in place, Project activities are not anticipated to have adverse impacts on the rufa red knot.

9.4.7 Bald and Golden Eagles

To mitigate potential adverse effects on nesting and breeding eagles, the USFS generally recommends maintaining a nest buffer of at least 0.5 mile for golden eagles nesting in the area, and a buffer of one mile for active bald eagle nests. Hiland will work with the USFS and USFWS as necessary if an active eagle nest is identified within one mile of the proposed pipeline route.

9.4.8 Migratory Bird Treaty Act

The commonly observed timeframe for avian migration in North Dakota is February 1st to July 15th. Construction activities for the proposed Project are planned to begin in July 2025. Based on the Project's schedule, construction activities are anticipated to occur during the recognized migration/breeding season. Hiland will develop and implement a mitigation plan which may include conducting surveys for nesting birds prior to the commencement of ground disturbing activities and implementing avoidance and monitoring measures of any active nests.

The NDGFD raised specific concerns during the agency notification process (see Section 6.10). Hiland is reviewing the Project plans and specifications and, to the extent feasible, will adjust Project execution with the objective of meeting the following goals:

- Clearing of wooded draws and native prairie will be minimized to the maximum extent possible, and all disturbed areas will be returned to pre-Project conditions.
- Steps should be taken to protect any wetlands that cannot be avoided, no alterations should be made to existing drainage patterns, and above-ground structures should not be placed in wetland areas. Unavoidable destruction or degradation of wetlands should be mitigated in kind.
- Hiland will conduct pre-construction raptor and migratory bird surveys and will implement appropriate buffers around active nests, if identified.

9.5 LAND USE

Hiland will obtain and comply with applicable county permits, including, but not limited to, grade and fill permits, ditch crossing permits, and road and utility permits. Hiland will retain one or more EIs to monitor compliance with environmental conditions of county permits.

Hiland will repair surface drains and drainage tiles disturbed during ROW preparation, construction, and maintenance activities. Hiland will repair private roads and farm lanes damaged when moving equipment or when obtaining access to the ROW. Hiland will repair or replace fences and gates removed or damaged as a result of ROW preparation, construction, or maintenance activities.

The Project will be installed at a minimum depth of 48 inches from the surface contour to minimize the potential for environmental damage resulting from deep tillage activities unless modified to accommodate special construction issues at the site. Upon installation of the pipeline, all Project locations will be returned to their original pre-construction contours and land use to the extent feasible.

9.6 CULTURAL RESOURCES

Consideration of the potential effects to cultural resources have occurred throughout the course of the Project. Hiland has revised the pipeline route to avoid cultural resources and proposes to use HDD as an avoidance measure when design alternatives are not possible. Hiland anticipates concurrence on the Project's cultural resources recommendations and a determination no historic properties affected from the North Dakota SHPO.

As discussed in Section 5.1, Hiland completed a Class III intensive cultural resources inventory survey of the Project Corridor and will submit the cultural resource report to North Dakota SHPO for agency review in January 2025. Following the SHPO's review of the report and project effect, Hiland will continue to consult with the SHPO to develop and implement avoidance measures to avoid effect to NRHP-eligible properties. Hiland will file future SHPO correspondence with the NDPSC upon receipt.

Despite the intensive Class III inventory, there remains a potential that previously unreported cultural resources or human remains could be encountered during later phases of the project. As such, Hiland developed a Project-specific UDP. The UDP specifies protocols that will be followed

in the unlikely event that mortuary features or other cultural resources are discovered during Project construction. At the point of discovery, ground disturbing work will be halted, the find will be secured until appropriate agencies can be notified, and the discovery will be assessed and mitigated under terms of the UDP. The UDP will be incorporated into contract documents and will be followed over the duration of the Project.

10.0 DEVELOPMENT

10.1 AREAS OF KNOWN GEOLOGIC INSTABILITY

Geologic instability can occur in areas of long steep slopes (30 meters or more) where slump/earthflow type landslides can occur, or in areas of soil slides or subsidence (USGS 1979). Areas subject to geological instability in McKenzie County generally include areas of large buttes (e.g., Black Butte, Sentinel Butte), mountains (e.g., Killdeer Mountains), or coulees (e.g., Shipton Coulee, Berg Coulee). Slump/earthflow-type landslides can also occur where rivers and creeks have incised deeply into the landscape (e.g., Bear Den Creek, Little Missouri River). Subsidence generally occurs in McKenzie County in areas where underground mining has occurred. Conditions that contribute to geologic instability occur in southern McKenzie County and are generally not found in the northern sections of McKenzie County where the Project is located (USGS 1979).

Hiland will avoid creating areas of soil instability by implementing construction BMPs that minimize impacts, and immediately upon construction completion, Hiland will implement measures to restore the ROW to its original condition. This will be accomplished through preserving and replacing topsoil and revegetating the disturbed areas. The disturbed areas will be monitored until the site reaches final stabilization per applicable permit(s) requirements.

10.2 PRESENT AND FUTURE NATURAL RESOURCE DEVELOPMENT IN THE AREA

A small percentage of North Dakota is held in public ownership. Of the 45 million acres of land in the state, approximately five percent (2.2 million acres) are owned in fee title by state and federal land management agencies. Most of these agencies work in cooperation with private producers in managing these lands. For example, the NDGFD leases certain tracts of wildlife management areas for grazing, haying, and food plots. The USFS manages for multiple uses and the sustained yield of renewable resources such as water, forage, wildlife, and recreation, as well as industry such as oil and gas development.

As discussed in Section 7.1, there are no national parks, national memorial parks, national historic sites and landmarks, national wilderness areas, or national monuments located within the Project Corridor. There are no designated or registered state parks, sites, monuments, or nature preserves along the Project Corridor. There are no county parks, recreational areas, municipal parks, or parks owned or administered by other governmental subdivisions crossed by the route. As such, there will be no direct impacts to national parks, sites, monuments, or wilderness.

As discussed in Section 7.2, there are no federally-managed wildlife areas; wild, scenic, or recreational rivers; or wildlife refuges within the study area, Project Corridor, or Route. The land use along the pipeline route is primarily in agricultural production with a significant number of oil wells and other pipeline systems and associated infrastructure in the area. As the pipeline is a buried utility, surface land use will return to pre-existing conditions once the pipeline is installed.

Other known development projects in the vicinity of the Project are discussed in Section 8.8 of this application. Hiland is not aware of any federal, state, or local natural resource development plans within the Project Corridor or study area.

11.0 QUALIFICATIONS OF PREPARERS

Eric Jensen

Senior Project Manager
Kinder Morgan

Degree: B.S. Mechanical Engineering from University of Saskatchewan

Mr. Jensen is a Senior Project Manager with over 28 years of experience in project management in the Oil and Gas Industry in various aspects related to construction, engineering, operations and maintenance activities. He has managed multiple pipeline projects that have been regulated with various federal, state and local agencies.

Cody Mikeska

Specialist- Permitting Compliance Sr. II
Kinder Morgan

Degree: B.S. Rangeland Ecology and Management from Texas A&M University

Mr. Mikeska Permitting Compliance Specialist with over 26 years of experience in environmental permitting and natural resource management in the oil and gas industry. He has managed the environmental permitting and compliance for multiple pipeline project that have been regulated with various federal, state, and local agencies.

John Cannon

Senior Project Manager
Merjent, Inc.

Degree(s): M.S. Environmental Planning, University of Minnesota
B.S. Environmental and Natural Resources, University of Minnesota

John Cannon is a Senior Environmental Project Manager in Merjent's Minneapolis, Minnesota office with over 15 years of consulting experience. Mr. Cannon provides environmental permitting services, including: NEPA compliance, wetland permitting, NPDES compliance, and SWPPP management services for oil and gas and energy projects throughout the Midwest. Mr. Cannon's responsibilities include client account management, project management, technical discipline task leadership, state and federal agency coordination, field work coordination and supervision, permit application preparation, and technical report preparation.

Matthew Long

Senior Landscape Ecologist, Pipeline Sector Lead
Merjent, Inc.

Degree(s): M.A. Theological Education, Gordon Conwell Theological Seminary
B.S. Watershed Management, Colorado State University

Mr. Long is a Senior Landscape Ecologist and a Project Manager with more than 30 years of environmental consulting experience serving the pipeline industry as well as other industrial, commercial, and government interests. He has served as Project Manager and resource specialist on numerous projects in over 48 states and several other countries. Mr. Long's responsibilities have included preparation of federal, state, and local permit applications, State

Public Utility Commission filings, construction and industrial SWPPPs, National Pollutant Discharge Elimination System applications, Soil Erosion and Sediment Control Plans, Environmental Mitigation Plans; and coordination of state and federal agency consultations. Mr. Long is also Merjent's Pipeline Sector Lead.

Teagan Loew, PWS, Certified Senior Ecologist, M.S.

Senior Ecologist and Deputy Project Manager
Merjent, Inc.

Degree(s): M.S., Environmental Science, Bowling Green State University
B.A. Environmental Studies, Bowling Green State University

Mr. Loew is a Senior Ecologist and Project Manager with 15 years of technical experience managing and completing a variety of natural resource focused projects in midwestern and western regions. His expertise includes wetland delineations, stream assessments, federal and state listed species coordination and surveys, biological surveys, restoration and mitigation design and planning, and a variety of permitting and documentation, including Clean Water Act jurisdictional determinations and 404/401 permitting, NPDES applications, compliance, and SWPPPs, NEPA Environmental Assessments, Environmental Impact Statements, and Categorical Exclusions, and various local permitting. He has managed and acted as a resource specialist on projects of diversified sizes within several market types.

Taylor Roberts, M.S.

GIS Analyst
Merjent, Inc.

Degree(s): B.A. Environmental Studies, University of Wisconsin – Madison;
B.A. Political Science, University of Wisconsin – Madison

Ms. Roberts is a GIS Analyst at Merjent, Inc. with 5 years of experience mapping, analyzing, managing, and maintaining various datasets using ArcGIS and ArcGIS Online. Ms. Roberts works as the technical lead for small and large-scale projects, providing geospatial data and mapping for various oil and gas pipeline, transmission line, solar and wind projects. GIS tasks performed include natural resource mapping and analysis, permitting support and impact assessments, mapping and analysis of T & E species, vegetation mapping and analysis, Python scripting, managing ArcGIS Online web applications for internal and external clients.

Erin Vander Stelt, M.S.

Sr. Environmental Scientist
Merjent, Inc.

Degree(s): M.S. Plant Biology and Conservation, Northwestern University
B.S. Biology – Ecological Sciences, Northwestern College

Mrs. Vander Stelt is an Environmental Consultant with Merjent with nine years of experience in the water resources and environmental regulation fields. Her experience in the environmental field includes deputy project management, interpretation and analysis of regulations, coordinating environmental field surveys and inspections, and conducting environmental field surveys and inspections. Mrs. Vander Stelt has permitting experience in nine states at the federal, state, and local levels to include Environmental Resource Reports, Nationwide Permit Applications, National Pollutant Discharge Elimination System applications, and additional coordination with local, state, and federal units of government.

Jenna Long, B.S.

Environmental Analyst
Merjent, Inc.
Degree(s): B.S. Natural Resources, Oregon State University
B.A. History, Columbia University

Ms. Long is an Environmental Analyst with Merjent with several years of experience in wetland delineations and environmental permitting across the west and mid-west. Her experience in the environmental field includes deputy project management, interpretation and analysis of regulations, and coordinating and conducting environmental compliance inspections. Ms. Long has permitting experience in 8 states at the federal, state, and local levels to include Environmental Report Resource Reports, Nationwide Permit applications, National Pollutant Discharge Elimination System applications and SWPPPs, floodplain permitting applications, and additional coordination with local, state, and federal units of government.

12.0 REFERENCES

- Cowardin, L. M., V. Carter, F.C. Golet, and E.D. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. Available online at: https://www.epa.gov/sites/default/files/2017-05/documents/cowardin_1979.pdf. Accessed January 8, 2025.
- David, G., Trier, P., Fritz, K., Kichefski, S., Nadeau, T., James, L., Topping, B., Wohl, E., Allen, A., Hamill, D. 2022. National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Interim Version. U.S. Engineer Research and Development Center (ERDC). Technical Report ERDC/CRREL TR-22-26. Wetlands Regulatory Assistance Program. Vicksburg, MS. Available online at: <http://dx.doi.org/10.21079/11681/46102>. Accessed January 8, 2025.
- Federal Emergency Management Agency. 2023. USA Structures State GDB Download Site: North Dakota. Available online at: https://disasters.geoplatform.gov/USA_Structures/. Accessed December 20, 2024.
- Google Earth, 2024. Various imagery. Available online at: <https://earth.google.com/web/>. Accessed December 20, 2024.
- National Park Service (NPS). 2023a. National Register of Historic Places Locations. Available online at: <https://www.arcgis.com/home/item.html?id=18fe4b262473496a8ca7871a67d844ee>. Accessed December 20, 2024.
- NPS. 2023b. Wilderness Areas. Available online at: <https://www.arcgis.com/home/item.html?id=2dba40f23e2644b0bcdba67b0d3c4ee1>. Accessed December 20, 2024.
- NPS. 2024a. Land Resource Division Boundary and Tract Service. Available online at: <https://www.arcgis.com/home/item.html?id=c8d60ffc5c4030a17762fe10e81c6a>. Accessed December 20, 2024.

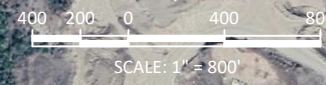
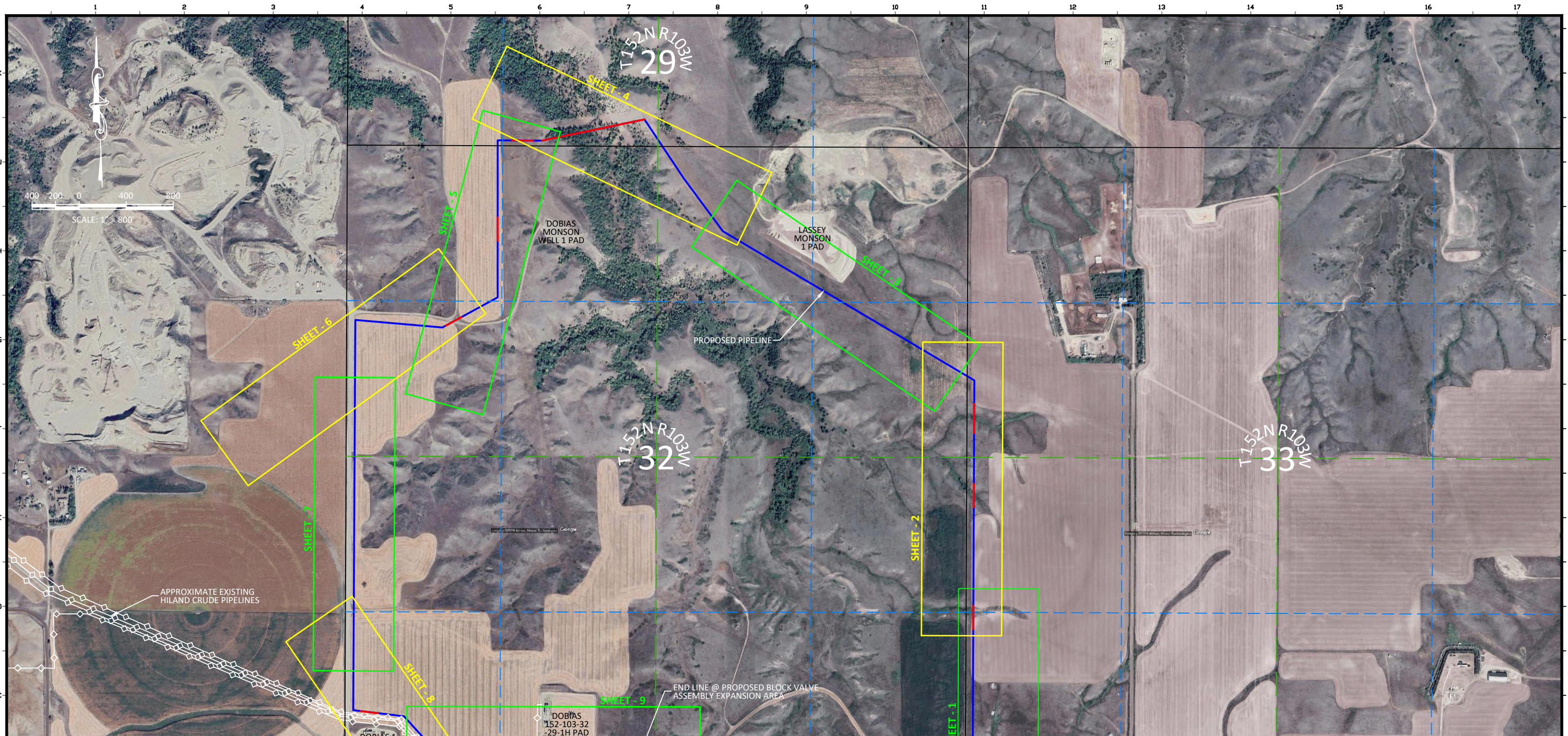
- NPS. 2024b. Monuments & Memorials. Available online at: <https://www.nps.gov/subjects/monuments/visit.htm>. Accessed December 20, 2024.
- NPS. 2024c. National Natural Landmarks Directory. Available online at: <https://www.nps.gov/subjects/nnlandmarks/nation.htm>. Accessed December 20, 2024.
- NPS. 2024d. National Register of Historic Places. Available online at: <https://irma.nps.gov/DataStore/Reference/Profile/2305746>. Accessed December 20, 2024.
- North Dakota. 2020. NDGISHUB Radio Mobile Commercial, Radio Mobile Broadcast, Antenna Structures, Radio AM and FM, Cell Phone Service Locations, Microwave, Paging, and Television Data. <https://gishubdata-ndgov.hub.arcgis.com/search?collection=Dataset>. Accessed December 23, 2024.
- North Dakota. 2021. NDGISHUB Rural Water Regional Systems. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-rural-water-regional-systems/about>. Accessed December 23, 2024.
- North Dakota. 2023. NDGISHUB Surface Tract Lands. Available online at <https://gishubdata-ndgov.hub.arcgis.com/datasets/ndgishub-surface-trust-lands/explore>. Accessed December 20, 2024.
- North Dakota. 2024. NDGISHUB Mineral Tract Lands. Available online at https://gishubdata-ndgov.hub.arcgis.com/datasets/7158ff2882db414a8e5a608d4006796d_0/explore. Accessed December 23, 2024.
- North Dakota Administrative Code. 2022. N.D. Admin Code 69-06-08-02 - Transmission Facility Corridor and Route Criteria.
- North Dakota Department of Environmental Quality. 2023. Source Water Protection Areas. Available online at: <https://hub.arcgis.com/maps/DEQ-ndgov::nddeq-source-water-protection-areas/explore?location=47.862483%2C-103.306979%2C10.45>. Accessed December 20, 2024.
- North Dakota Department of Mineral Resources. 2024. ND Monthly Oil Production Statistics. Available online at: <https://www.dmr.nd.gov/oilgas/stats/historicaloilprodstats.pdf>. Accessed November 2024.
- North Dakota Department of Water Resources. 2021. Water Wells. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/apps/NDGOV::department-of-water-resources-ground-and-surface-water/about>. Accessed December 20, 2024.
- North Dakota Forest Service. 2022. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-state-forest/about>. Accessed December 20, 2024.
- North Dakota Game and Fish Department (NDGFD). 2022. Wildlife Management Area. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-wildlife-management-areas/about>. Accessed December 20, 2024.

- NDGFD. 2023. Private Land Open to Sportsmen. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-plots-lands/about>. Accessed December 20, 2024.
- North Dakota Geological Survey. 2023. Areas of Landslides in North Dakota. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-landslides/about>. Accessed December 20, 2024.
- North Dakota Legislative Branch. 2017. Little Missouri State Scenic River Act. Available online at: <https://ndlegis.gov/cencode/t61c29.pdf>.
- North Dakota Industrial Commission – Oil and Gas Division. 2025. Current Active Drilling Rig List Daily Report 19187. Available online at <https://www.dmr.nd.gov/oilgas/riglist.asp>. Accessed January 31, 2025.
- North Dakota Parks and Recreation Department. 2022. NDGISHUB State Parks. Available online at: https://gishubdata-ndgov.hub.arcgis.com/datasets/1559f698420942b08e06138cceed5a74_0/about. Accessed December 20, 2024.
- North Dakota Public Service Commission. 2022. Abandoned Mines. Available online at: <https://gishubdata-ndgov.hub.arcgis.com/datasets/NDGOV::ndgishub-abandoned-mines/about>. Accessed December 23, 2024.
- State Historical Society of North Dakota. 2024a. North Dakota Historic Markers. Available online at: <https://www.history.nd.gov/hp/historicmarkers.html>. Accessed December 19, 2024.
- State Historical Society of North Dakota. 2024b. State Historic Sites of North Dakota. Available online at: <https://www.history.nd.gov/historicsites/>. Accessed December 19, 2024.
- United Nations Institute for Disarmament Research. 2024. United States New START Report. Available online at: <https://nuclearforces.org/country-profiles/united-states>. Accessed December 19, 2024.
- United States Army Corps of Engineers (USACE) 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS. Available online at: https://www.sac.usace.army.mil/Portals/43/docs/regulatory/1987_wetland_delineation_manual_reg.pdf. Accessed January 8, 2025.
- USACE. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains (Version 2.0). ERDC/EL TR-10-1, U.S. Army Engineer Research and Development Center, Vicksburg, MS. Available online at: <https://www.mvp.usace.army.mil/portals/57/docs/regulatory/website%20organization/great%20plains%20regional%20supplement.pdf>. Accessed January 8, 2025.
- USACE. 2022. National Wetland Plant List, version 3.5. USACE Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH. Available online at: <http://wetland-plants.usace.army.mil/>.

- USACE. 2023. USACE Reservoirs. Available online at: https://geospatial-usace.opendata.arcgis.com/datasets/03e322d7e89b48a9b48e9c3f4bcaf29e_0/explore?showTable=true. Accessed December 19, 2024.
- United States Fish and Wildlife Service (USFWS). 2023. National Wilderness Boundaries. Available online at: https://gisfws.opendata.arcgis.com/datasets/31c41fcca6d34d3fa9924de38651a317_0/about. Accessed December 19, 2024.
- USFWS. 2024. Information for Planning and Conservation. USFWS website. Available online at: <https://ecos.fws.gov/ipac/>. Accessed November 13, 2024.
- USFWS. 2024a. ECOS Environmental Conservation Online System, USFWS Threatened & Endangered Species Active Critical Habitat Report. Available online at: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>. Accessed November 13, 2024.
- USFWS. 2024b. National Wildlife Refuge System GIS Data and Mapping Tools. Available online at: <https://www.fws.gov/service/national-wildlife-refuge-system-gis-data-and-mapping-tools>. Accessed December 19, 2024.
- USFWS. 2024c. National Realty Tracts. Available online at: <https://ecos.fws.gov/ServCat/Reference/Profile/168129>. Accessed December 19, 2024.
- United States Forest Service (USFS). 2022. National Wild and Scenic River Lines. Available online at: <https://data-usfs.hub.arcgis.com/datasets/usfs::national-wild-and-scenic-river-lines-feature-layer/about>. Accessed December 19, 2024.
- USFS. 2024. National Grasslands Unit. Available online at: <https://data.fs.usda.gov/geodata/edw/datasets.php?xmlKeyword=National+Grassland+Units>. Accessed December 19, 2024.
- USGS. 1979. Unstable Ground in Western North Dakota. Geological Survey Circular 798. Available online at: <https://pubs.usgs.gov/circ/1979/0798/report.pdf>. Accessed December 19, 2024.
- USGS. 2014. NLCD 2011 Land Cover (2011 Edition, amended 2014). Available online at: <https://www.usgs.gov/media/images/nlcd-2011-land-cover-2011-edition-amended-2014>. Accessed January 8, 2025.
- USGS. 2024. Protected Areas Database of the United States. Available online at: <https://www.usgs.gov/data/protected-areas-database-united-states-pad-us-4>. Accessed December 19, 2024.

Exhibit A

Figures and Engineering Documents

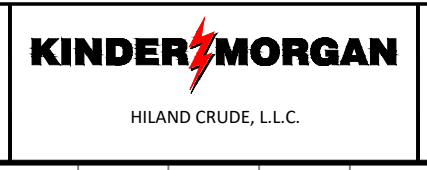


DRAWING INDEX			
DESCRIPTION			SHEET #
STATION: 0+00.00	to	23+00.00	1
STATION: 23+00.00	to	46+00.00	2
STATION: 46+00.00	to	69+00.00	3
STATION: 69+00.00	to	89+00.00	4
STATION: 89+00.00	to	111+00.00	5
STATION: 111+00.00	to	125+00.00	6
STATION: 125+00.00	to	145+00.00	7
STATION: 145+00.00	to	160+00.00	8
STATION: 160+00.00	to	177+43.73	9

ESTIMATED PIPE FOOTAGES	
8" .188 W.T. MAINLINE PIPE FBE	: 15,054'
8" .277 W.T. BORE PIPE FBE+ARO	: 2,690'
TOTAL 8" PIPE:	17,744'

CRITICAL_DRAWING			
Revision	Description	Project ID	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013	1/10/2025
B	EXTEND BORES	16013	12/23/2024
A	PROPOSED	16013	12/17/2024

NOTES



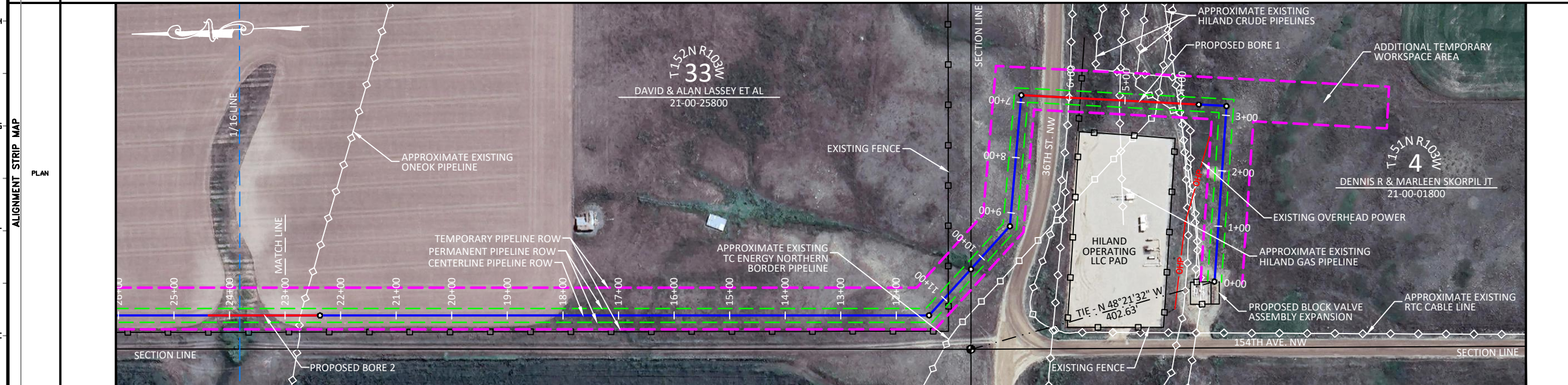
GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
INDEX SHEET
0+00.00 TO 177+43.73
SECTION 4, T151N R103W,
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status: PROPOSED	
State: NORTH DAKOTA	PIN No:
County: MCKENZIE	Scale: 1" = 800'
Category:	
File Name: GULLIKSON REROUTE TIE-IN ALIGNMENT PLANDwg	
Drawing No:	Rev
GULLIKSON REROUTE TIE-IN-PRO-001	

PROTECTION EASEMENT	DAVID & ALAN LASSEY ET AL 21-00-25800 77.05	DENNIS R & MARLEEN SKORPIL JT 21-00-01800 62.34	
LAND PLAT	23+00.00	10+28.60	0+00.00
ROADS			
STATION			
PIPELINE STATIONING	23+00.00 MATCHLINE 22+72.61 APPROXIMATE EXISTING ONEOK PIPELINE 22+37.61 BEGIN BORE 2	11+40.83 P.I. < 47°46'52" RT 10+89.03 EXISTING FENCE 10+28.60 SECTION/OWNERSHIP LINE 9+24.04 P.I. < 37°15'34" RT	6+86.98 P.I. < 88°05'17" LT 6+86.98 END BORE 1 6+30.54 36TH ST. NW 6+00.97 APPROXIMATE EXISTING RTC CABLE LINE 5+80.72 EXISTING FENCE 5+10.01 APPROXIMATE EXISTING HILAND GAS PIPELINE 5+10.01 APPROXIMATE EXISTING TC ENERGY NORTHERN BORDER PIPELINE 4+41.92 APPROXIMATE EXISTING HILAND CRUDE PIPELINE 4+35.44 APPROXIMATE EXISTING HILAND CRUDE PIPELINE 4+03.59 APPROXIMATE EXISTING HILAND CRUDE PIPELINE 3+99.41 APPROXIMATE EXISTING HILAND CRUDE PIPELINE 3+66.98 BEGIN BORE 1 3+17.02 P.I. < 90°53'16" LT
CROSSINGS			0+00.00 BEGIN LINE @ BLOCK VALVE ASSEMBLY EXPANSION AREA

LEGEND

- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- PROPOSED PIPELINE
- PROPOSED BORE
- PROPOSED PERMANENT EASEMENT (PLAN)
- PROPOSED TEMPORARY EASEMENT (PLAN)
- SECTION LINE
- 1/4 LINE
- 1/16 LINE
- APPROXIMATE EXISTING PIPELINE
- EXISTING FENCE
- OVERHEAD POWER LINE
- FOUND CORNER MONUMENT
- POINT OF INTERSECTION



GENERAL NOTES

THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOD 12B HELD ON THE CONTROL POINT.

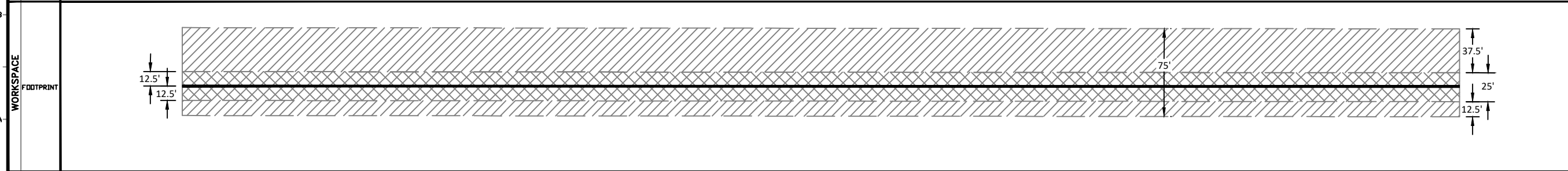
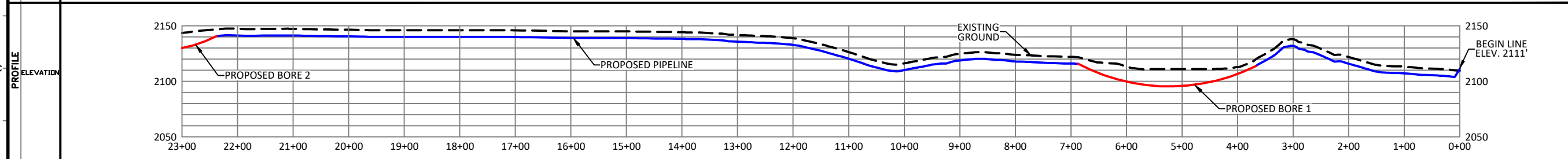
DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

MATERIAL	62'	1551'	320'	367'
PIPELINE	②	①	②	①
COATING				
DESIGN FACTOR				
CLASS				
LOCATION				
MAP				

PIPE SUMMARY

ITEM	DESCRIPTION	QUANTITY
1	8" .188 W.T. MAINLINE PIPE FBE	1918'
2	8" .277 W.T. BORE PIPE FBE+ARO	382'



SCALE & PROJECTION

200 100 0 200 400

SCALE: 1" = 200' HORIZONTAL
1" = 100' VERTICAL

PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT

CRITICAL DRAWING

Revision	Description	Project ID	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013	1/10/2025
B	EXTEND BORES	16013	12/23/2024
A	PROPOSED	16013	12/17/2024

NOTES



Reference Drawings

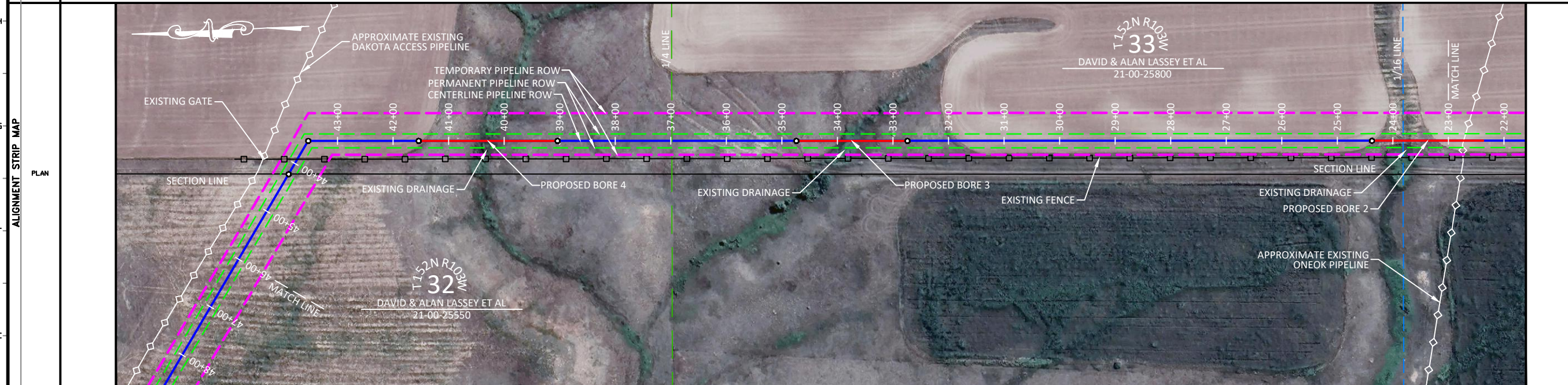
GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 1 OF 9
0+00.00 (B.O.L.) TO 23+00.00
SECTIONS 29, 32 & 33, T152N R103W,
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status: **PROPOSED**

State: NORTH DAKOTA	PIN No:
County: MCKENZIE	Scale: 1"=200'
Category:	
File Name: GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg	
Drawing No: GULLIKSON REROUTE TIE-IN-PRO-001	Rev:

LAND PROTECTION EASEMENT	DAVID & ALAN LASSEY ET AL	DAVID & ALAN LASSEY ET AL
	21-00-25550	21-00-25800
LAND PLAT	10.77	128.62
RODS		
STATION	46+00.00	23+00.00

LEGEND	
	PROPOSED PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	PROPOSED PIPELINE
	PROPOSED BORE
	PROPOSED PERMANENT EASEMENT (PLAN)
	PROPOSED TEMPORARY EASEMENT (PLAN)
	SECTION LINE
	1/4 LINE
	1/16 LINE
	APPROXIMATE EXISTING PIPELINE
	EXISTING FENCE
	OVERHEAD POWER LINE
	FOUND CORNER MONUMENT
	POINT OF INTERSECTION



GENERAL NOTES

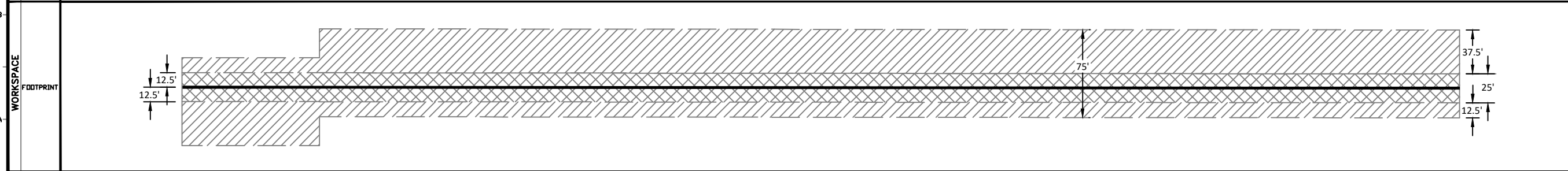
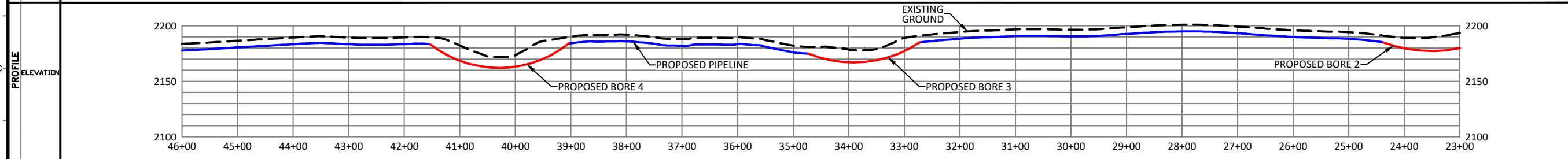
THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOD 12B HELD ON THE CONTROL POINT.

DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

PIPELINE MATERIAL	PIPE SUMMARY								
	ITEM	DESCRIPTION	QUANTITY	ITEM	DESCRIPTION	QUANTITY	ITEM	DESCRIPTION	QUANTITY
①	1	8" .188 W.T. MAINLINE PIPE FBE	1712'	②	2	8" .277 W.T. BORE PIPE FBE+ARO	588'		



SCALE & PROJECTION	
	SCALE: 1" = 200' HORIZONTAL 1" = 100' VERTICAL
PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT	

CRITICAL DRAWING		
Revision	Description	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	1/10/2025
B	EXTEND BORES	12/23/2024
A	PROPOSED	12/17/2024

NOTES	
16013	1/14/2025
16013	1/10/2025
16013	12/23/2024
16013	12/17/2024

KINDER MORGAN
HILAND CRUDE, L.L.C.

WHS
ENGINEERING SURVEYING PLANNING
1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

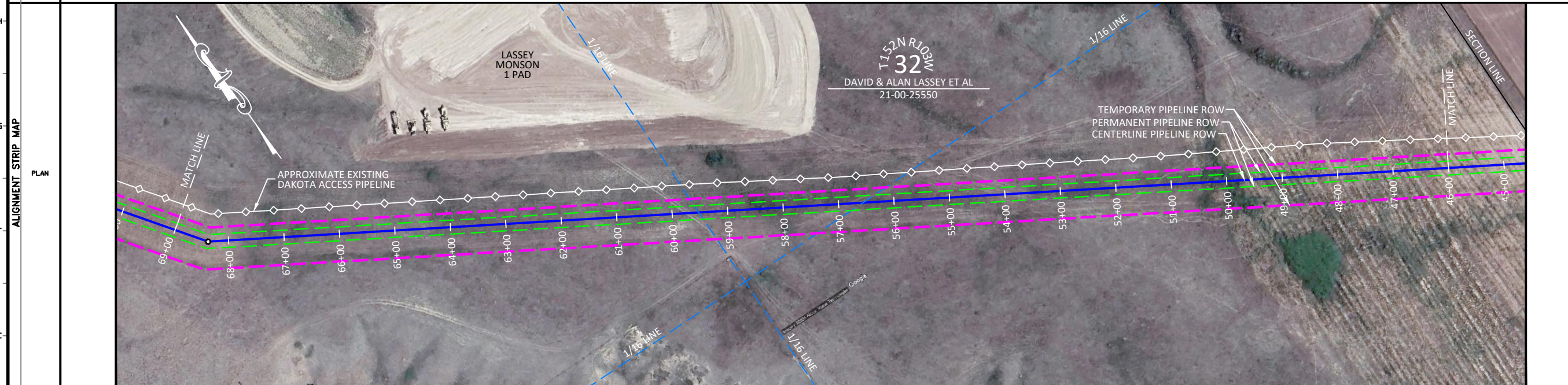
GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 2 OF 9
23+00.00 TO 46+00.00
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status: PROPOSED	
State: NORTH DAKOTA	PIN No:
County: MCKENZIE	Scale: 1"=200'
Category:	
File Name: GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg	
Drawing No: GULLIKSON REROUTE TIE-IN-PRO-001	Rev:

PROTECTION EASEMENT	DAVID & ALAN LASSEY ET AL 21-00-25550 139.39													46+00.00		
LAND PLAT																
ROADS																
STATION	69+00.00															
PIPELINE STATIONING	68+36.96 P.I. < 22°48'40" RT													46+00.00 MATCHLINE		
CROSSINGS	69+00.00 MATCHLINE															

LEGEND

- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- PROPOSED PIPELINE
- PROPOSED BORE
- PROPOSED PERMANENT EASEMENT (PLAN)
- PROPOSED TEMPORARY EASEMENT (PLAN)
- SECTION LINE
- 1/4 LINE
- 1/16 LINE
- APPROXIMATE EXISTING PIPELINE
- EXISTING FENCE
- OVERHEAD POWER LINE
- FOUND CORNER MONUMENT
- POINT OF INTERSECTION



GENERAL NOTES

THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOID 12B HELD ON THE CONTROL POINT.

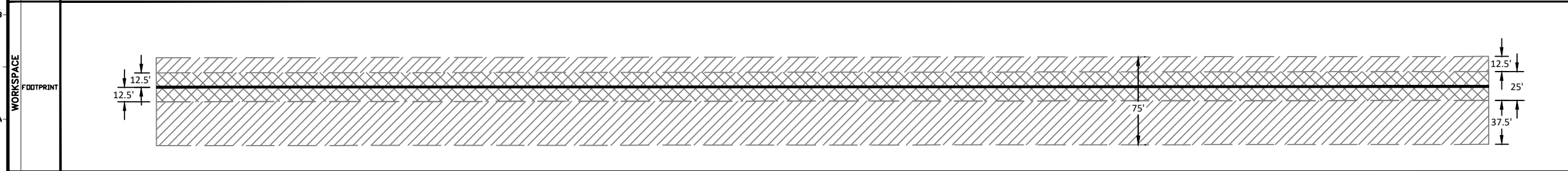
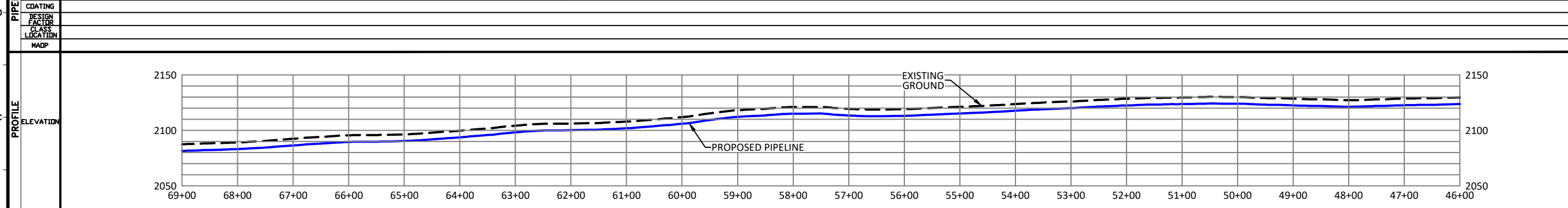
DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

MATERIAL	2300'	
COATING	①	
DESIGN FACTOR		
CLASS		
LOCATION		
MAP		

PIPE SUMMARY

ITEM	DESCRIPTION	QUANTITY
1	8" .188 W.T. MAINLINE PIPE FBE	2300'



SCALE & PROJECTION

200 100 0 200 400

SCALE: 1" = 200' HORIZONTAL
1" = 100' VERTICAL

PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT

CRITICAL DRAWING

Revision	Description	Project ID	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013	1/10/2025
B	EXTEND BORES	16013	12/23/2024
A	PROPOSED	16013	12/17/2024

NOTES

KINDER MORGAN
HILAND CRUDE, L.L.C.

WHS
ENGINEERING SURVEYING PLANNING
1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

Reference Drawings

GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 3 OF 9
46+00.00 TO 69+00.00
SECTIONS 29, 32 & 33, T152N R103W,
SECTION 4, T151N R103W, 5TH P.M.,
MCKENZIE COUNTY, NORTH DAKOTA

Status: **PROPOSED**

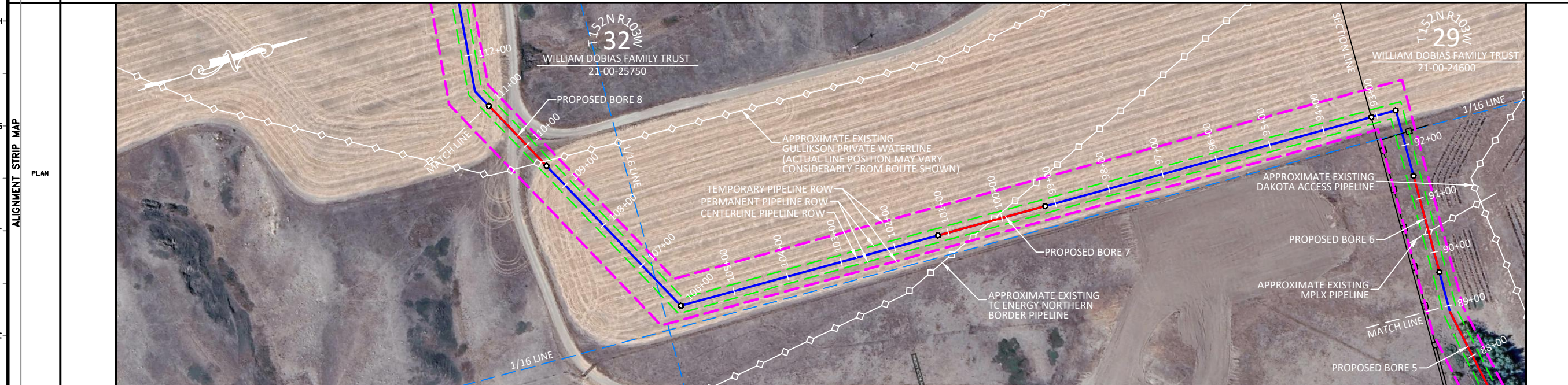
State: NORTH DAKOTA	PIN No:
County: MCKENZIE	Scale: 1"=200'
Category:	
File Name: GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg	
Drawing No:	Rev:

GULLIKSON REROUTE TIE-IN-PRO-001

LAND PLAT	PROTECTION EASEMENT	STATION	OWNER	ACRES
111+00.00		111+00.00	WILLIAM DOBIAS FAMILY TRUST	21-00-25750
110+98.49		110+98.49	WILLIAM DOBIAS FAMILY TRUST	21-00-24600
110+23.49		110+23.49	DARIN & BARBARA A CURREN JT	21-00-24700
109+48.49		109+48.49		
105+99.19		105+99.19		
101+18.96		101+18.96		
100+18.96		100+18.96		
99+18.96		99+18.96		
93+10.60		93+10.60		
92+22.09		92+22.09		
92+21.44		92+21.44		
91+42.66		91+42.66		
90+37.66		90+37.66		
89+62.66		89+62.66		
89+00.00		89+00.00		

LEGEND

- PROPOSED PERMANENT EASEMENT
- TEMPORARY WORKSPACE
- PROPOSED PIPELINE
- PROPOSED BORE
- PROPOSED PERMANENT EASEMENT (PLAN)
- PROPOSED TEMPORARY EASEMENT (PLAN)
- SECTION LINE
- 1/4 LINE
- 1/16 LINE
- APPROXIMATE EXISTING PIPELINE
- EXISTING FENCE
- OVERHEAD POWER LINE
- FOUND CORNER MONUMENT
- POINT OF INTERSECTION



GENERAL NOTES

THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOD 12B HELD ON THE CONTROL POINT.

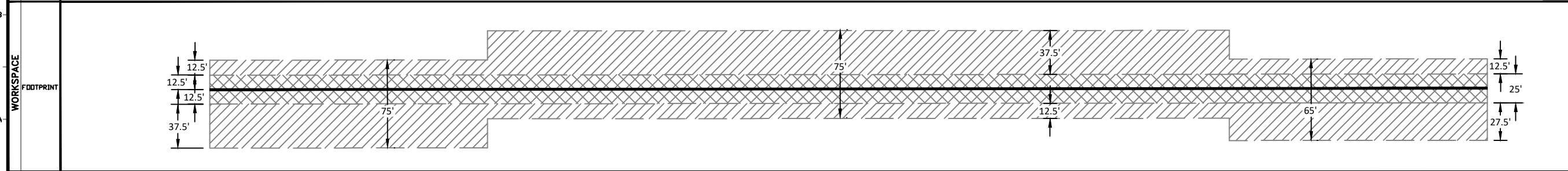
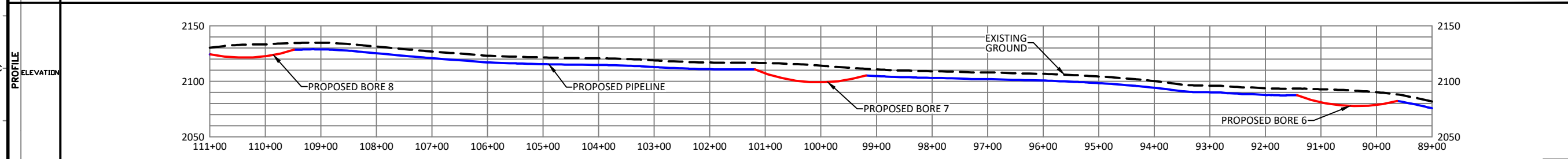
DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

PIPELINE	MATERIAL	1'	150'	830'	200'	776'	180'	63'
		①	②	①	②	①	②	①

PIPE SUMMARY

ITEM	DESCRIPTION	QUANTITY
1	8" .188 W.T. MAINLINE PIPE FBE	1670'
2	8" .277 W.T. BORE PIPE FBE+ARO	530'



SCALE & PROJECTION

200 100 0 200 400

SCALE: 1" = 200' HORIZONTAL
1" = 100' VERTICAL

PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT

CRITICAL DRAWING

Revision	Description	Project ID	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013	1/10/2025
B	EXTEND BORES	16013	12/23/2024
A	PROPOSED	16013	12/17/2024

NOTES

KINDER MORGAN
HILAND CRUDE, L.L.C.

WHS
ENGINEERING SURVEYING PLANNING
1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

Reference Drawings

GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 5 OF 9
89+00.00 TO 111+00.00
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

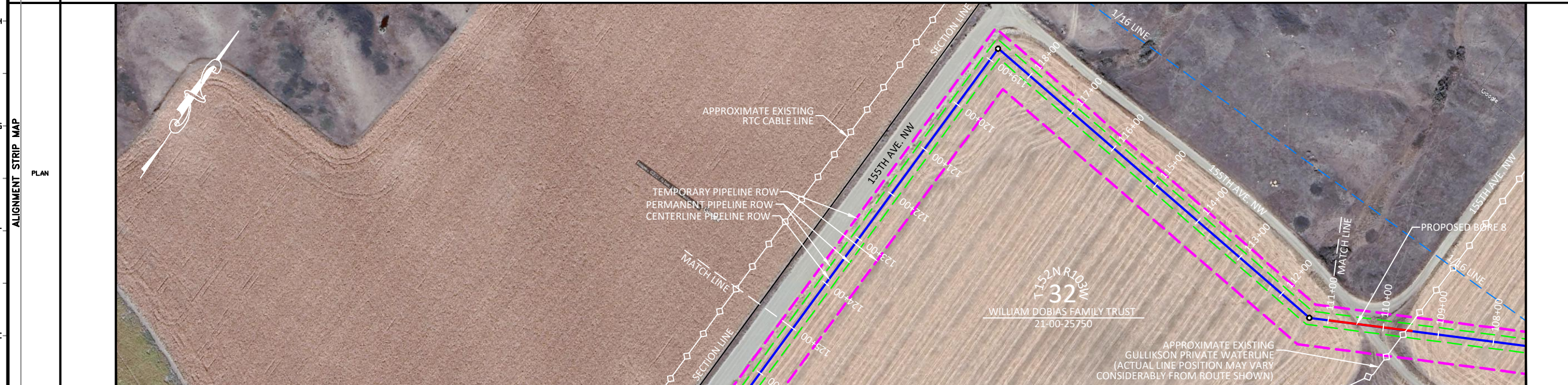
Status: PROPOSED

State: NORTH DAKOTA	PIN No:
Country: MCKENZIE	Scale: 1"=200'
Category:	
File Name: GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg	
Drawing No:	Rev:

GULLIKSON REROUTE TIE-IN-PRO-001

LAND	PROTECTION EASEMENT	125+00.00	WILLIAM DOBIAS FAMILY TRUST 21-00-25750 84.85	111+00.00	
	LAND PLAT RODS STATION				
PIPELINE STATIONING	CROSSINGS	125+00.00 MATCHLINE	118+75.20 P.I. < 94°38'02" LT	111+34.05 P.I. < 33°28'21" RT	111+00.00 MATCHLINE

LEGEND	
	PROPOSED PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	PROPOSED PIPELINE
	PROPOSED BORE
	PROPOSED PERMANENT EASEMENT (PLAN)
	PROPOSED TEMPORARY EASEMENT (PLAN)
	SECTION LINE
	1/4 LINE
	1/16 LINE
	APPROXIMATE EXISTING PIPELINE
	EXISTING FENCE
	OVERHEAD POWER LINE
	FOUND CORNER MONUMENT
	POINT OF INTERSECTION



GENERAL NOTES

THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

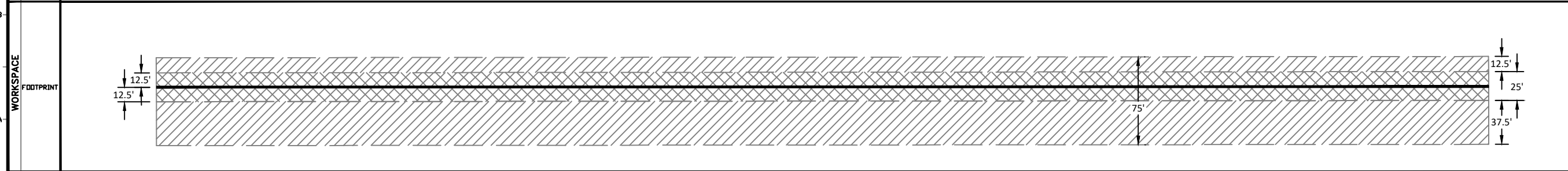
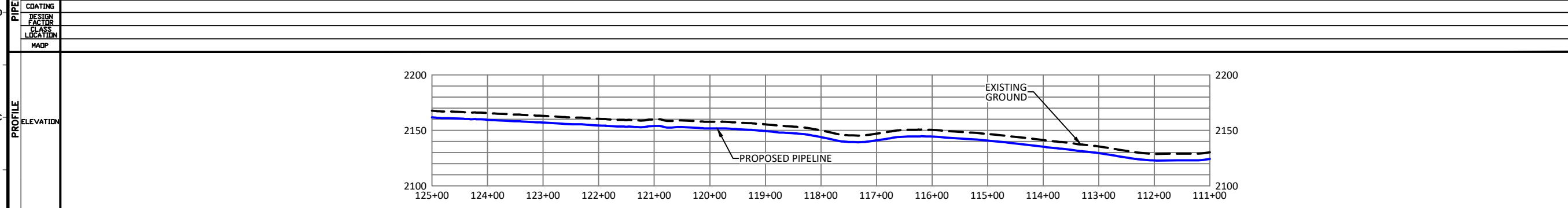
BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOID 12B HELD ON THE CONTROL POINT.

DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

MATERIAL	1400'
COATING	
DESIGN FACTOR	
CLASS	
LOCATION	
MAP	

PIPE SUMMARY		
ITEM	DESCRIPTION	QUANTITY
1	8" .188 W.T. MAINLINE PIPE FBE	1400'



SCALE & PROJECTION	
	SCALE: 1" = 200' HORIZONTAL
	1" = 100' VERTICAL
PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT	

CRITICAL DRAWING			
Revision	Description	Project ID	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013	1/10/2025
B	EXTEND BORES	16013	12/23/2024
A	PROPOSED	16013	12/17/2024

NOTES	

HILAND CRUDE, L.L.C.

ENGINEERING SURVEYING PLANNING
 1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
 307.362.6065 | 866.938.3088 | www.whsmithpc.com

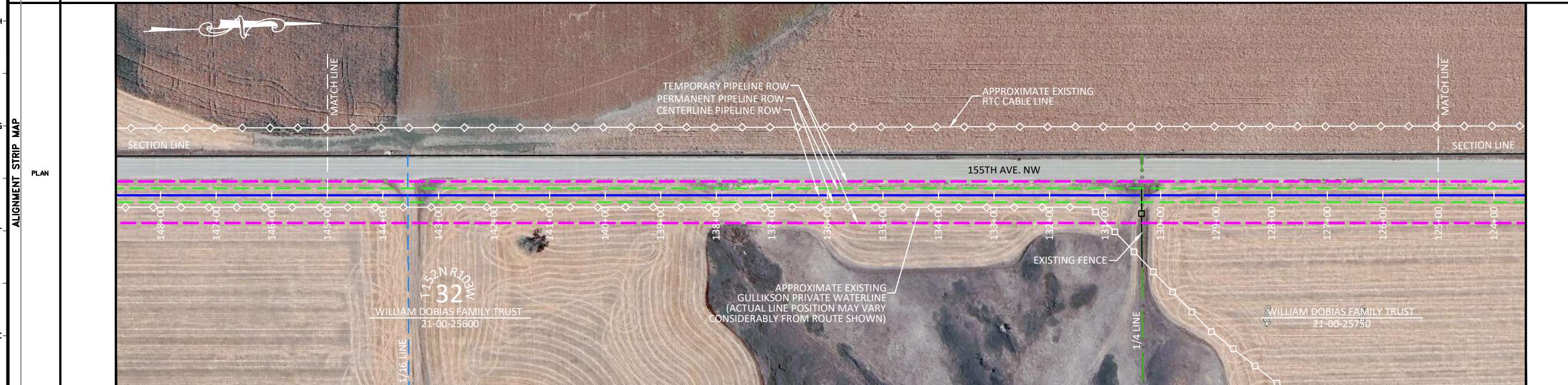
GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 6 OF 9
111+00.00 TO 125+00.00
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status:	PROPOSED		
State:	NORTH DAKOTA	PIN No:	
County:	MCKENZIE	Scale:	1"=200'
Category:			
File Name:	GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg		
Drawing No:	GULLIKSON REROUTE TIE-IN-PRO-001	Rev:	

Jan 14, 2025 - 10:00AM

LAND	PROTECTION EASEMENT	145+00.00	WILLIAM DOBIAS FAMILY TRUST 21-00-25600 88.88	130+33.52	WILLIAM DOBIAS FAMILY TRUST 21-00-25750 32.33	125+00.00
	LAND PLAT					
ROADS						
STATION						
PIPELINE STATIONING		145+00.00 MATCHLINE		130+34.36 EXISTING FENCE 130+33.52 OWNERSHIP LINE		125+00.00 MATCHLINE
	CROSSINGS					

LEGEND	
	PROPOSED PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	PROPOSED PIPELINE
	PROPOSED BORE
	PROPOSED PERMANENT EASEMENT (PLAN)
	PROPOSED TEMPORARY EASEMENT (PLAN)
	SECTION LINE
	1/4 LINE
	1/16 LINE
	APPROXIMATE EXISTING PIPELINE
	EXISTING FENCE
	OVERHEAD POWER LINE
	FOUND CORNER MONUMENT
	POINT OF INTERSECTION



GENERAL NOTES

THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

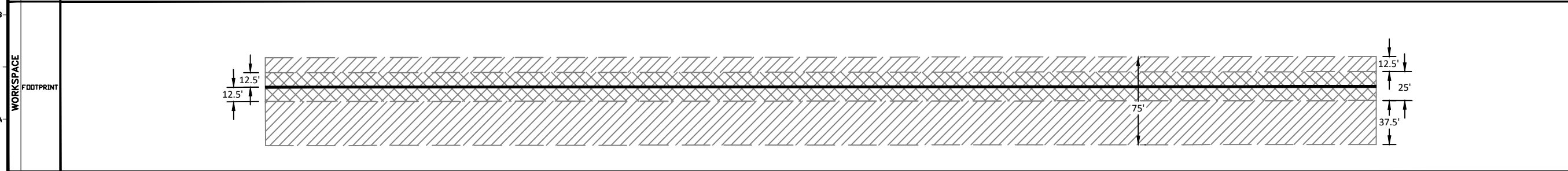
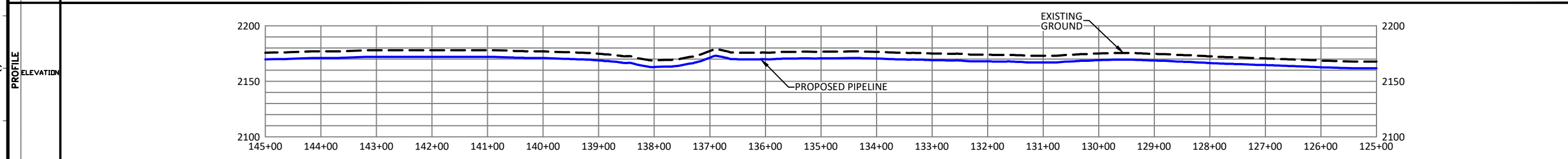
BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOID 12B HELD ON THE CONTROL POINT.

DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

PIPELINE	MATERIAL	2000'
	COATING	
	DESIGN FACTOR	
	CLASS LOCATION	
	MAOP	

PIPE SUMMARY		
ITEM	DESCRIPTION	QUANTITY
1	8" .188 W.T. MAINLINE PIPE FBE	2000'



SCALE & PROJECTION	
	SCALE: 1" = 200' HORIZONTAL 1" = 100' VERTICAL
PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT	

CRITICAL DRAWING		
Revision	Description	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013 1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013 1/10/2025
B	EXTEND BORES	16013 12/23/2024
A	PROPOSED	16013 12/17/2024

NOTES	

HILAND CRUDE, L.L.C.

ENGINEERING SURVEYING PLANNING
 1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
 307.362.6065 | 866.938.3088 | www.whsmithpc.com

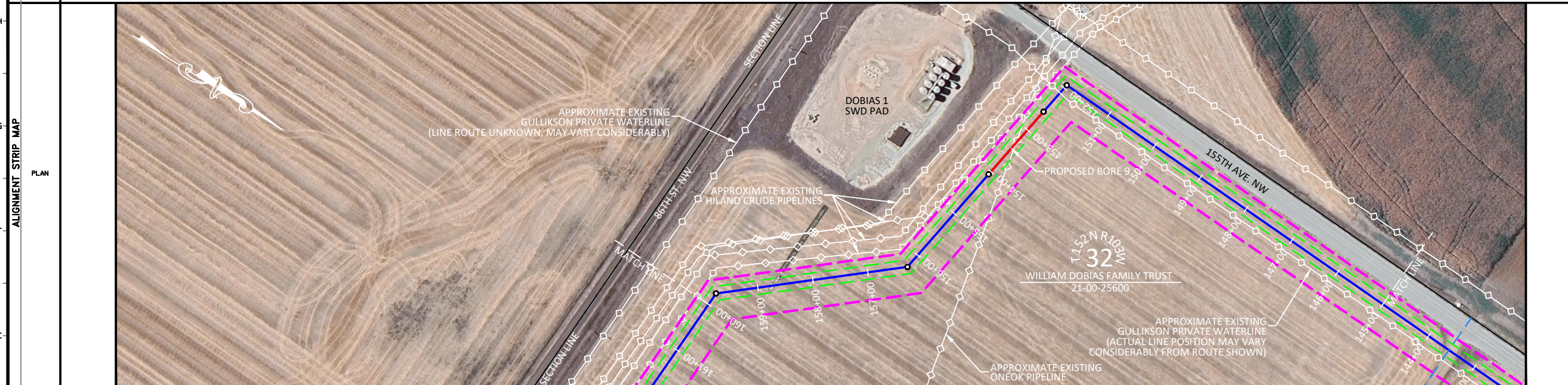
GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 7 OF 9
125+00.00 TO 145+00.00
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status:	PROPOSED	
State:	NORTH DAKOTA	PIN No:
County:	MCKENZIE	Scale:
Category:		
File Name:	GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg	
Drawing No:	GULLIKSON REROUTE TIE-IN-PRO-001	Rev:

DATE PLOTTED: 12/17/2024 10:58 AM

LAND	PROTECTION EASEMENT	WILLIAM DOBIAS FAMILY TRUST 21-00-25600 90.91										145+00.00
	LAND PLAT RODS STATION	160+00.00										
PIPELINE STATIONING	CROSSINGS											145+00.00 MATCHLINE

LEGEND	
	PROPOSED PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	PROPOSED PIPELINE
	PROPOSED BORE
	PROPOSED PERMANENT EASEMENT (PLAN)
	PROPOSED TEMPORARY EASEMENT (PLAN)
	SECTION LINE
	1/4 LINE
	1/16 LINE
	APPROXIMATE EXISTING PIPELINE
	EXISTING FENCE
	OVERHEAD POWER LINE
	FOUND CORNER MONUMENT
	POINT OF INTERSECTION



GENERAL NOTES

THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

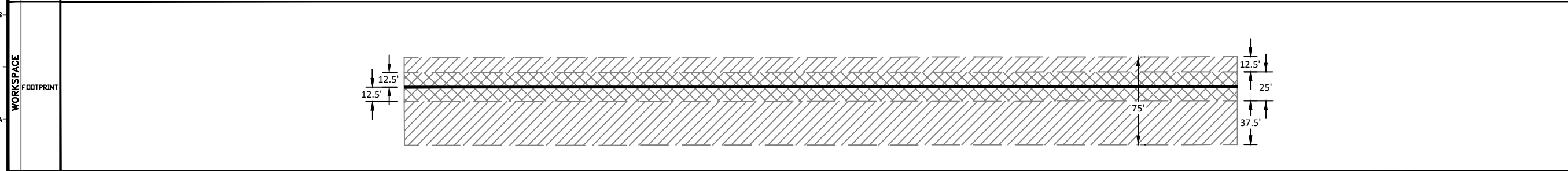
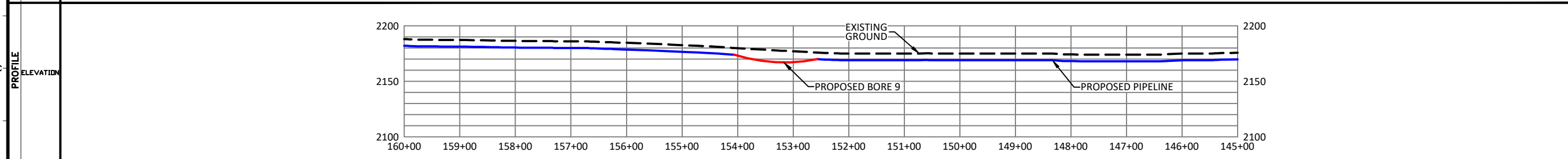
BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOID 12B HELD ON THE CONTROL POINT.

DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

PIPELINE	MATERIAL	594'	150'	756'
	COATING	①	②	①
DESIGN FACTOR	CLASS			
	LOCATION			
MADP				

PIPE SUMMARY		
ITEM	DESCRIPTION	QUANTITY
1	8" .188 W.T. MAINLINE PIPE FBE	1350'
2	8" .277 W.T. BORE PIPE FBE+ARO	150'



SCALE & PROJECTION	
	SCALE: 1" = 200' HORIZONTAL 1" = 100' VERTICAL
PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT	

CRITICAL DRAWING		
Revision	Description	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	16013 1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	16013 1/10/2025
B	EXTEND BORES	16013 12/23/2024
A	PROPOSED	16013 12/17/2024

NOTES	

KINDER MORGAN

HILAND CRUDE, L.L.C.

WHS

ENGINEERING SURVEYING PLANNING

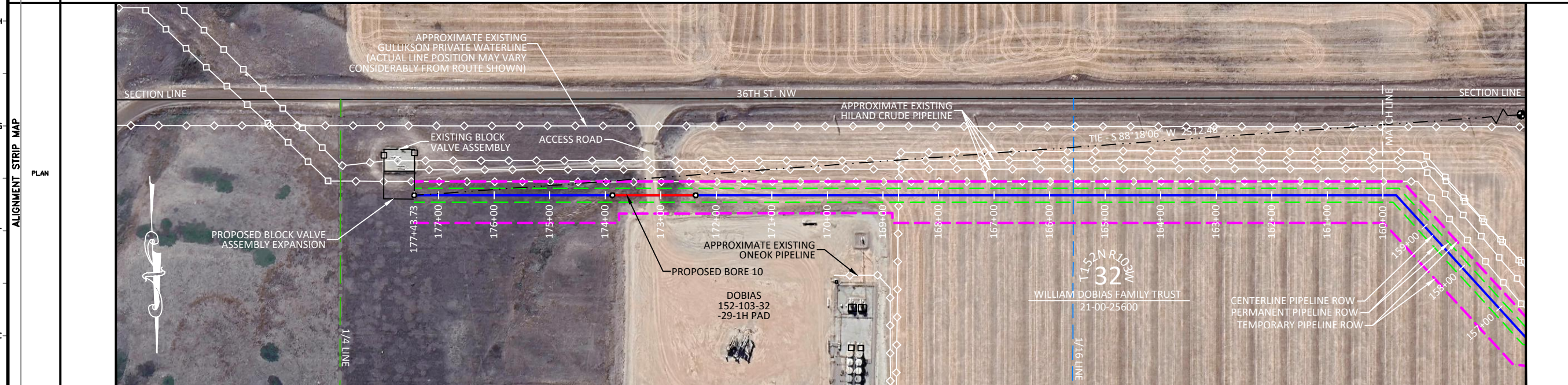
1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 8 OF 9
145+00.00 TO 160+00.00
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status:	PROPOSED
State:	NORTH DAKOTA
Country:	MCKENZIE
Category:	
File Name:	GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg
Drawing No:	GULLIKSON REROUTE TIE-IN-PRO-001

PROTECTION EASEMENT	WILLIAM DOBIAS FAMILY TRUST 21-00-25600 105.68													160+00.00
LAND PLAT	177+43.73													160+00.00
ROADS	177+43.73 END LINE @ BLOCK VALVE ASSEMBLY EXPANSION AREA													160+00.00 MATCHLINE
STATION	173+87.04 END BORE 10 173+15.07 PAD ACCESS ROAD 172+37.04 BEGIN BORE 10													160+00.00 MATCHLINE

LEGEND	
	PROPOSED PERMANENT EASEMENT
	TEMPORARY WORKSPACE
	PROPOSED PIPELINE
	PROPOSED BORE
	PROPOSED PERMANENT EASEMENT (PLAN)
	PROPOSED TEMPORARY EASEMENT (PLAN)
	SECTION LINE
	1/4 LINE
	1/16 LINE
	APPROXIMATE EXISTING PIPELINE
	EXISTING FENCE
	OVERHEAD POWER LINE
	FOUND CORNER MONUMENT
	POINT OF INTERSECTION



GENERAL NOTES

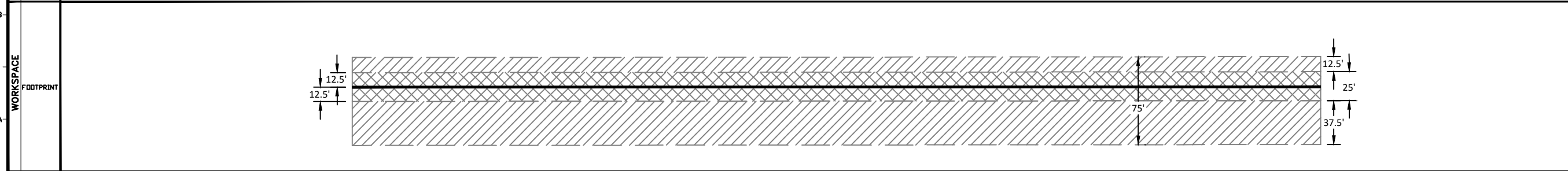
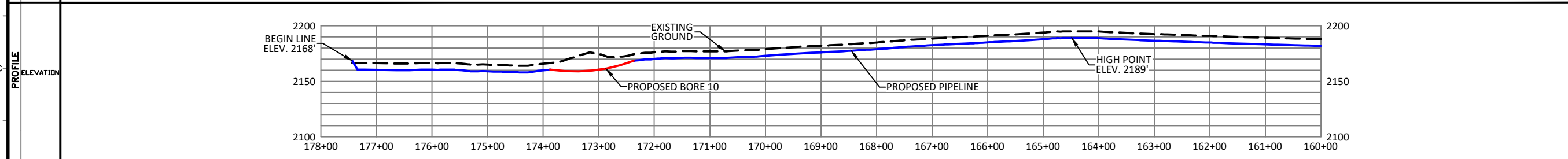
THIS DOCUMENT IS FOR PIPELINE EASEMENT PURPOSES AND DOES NOT CONSTITUTE AN ASBUILT OR BOUNDARY SURVEY.

BEARINGS ARE ORIENTED TO THE NORTH DAKOTA STATE PLANE COORDINATE SYSTEM, NORTH ZONE, FROM GPS MEASUREMENTS AT A WHS CONTROL POINT (5/8" REBAR), LATITUDE: 47°57'02.016" NORTH, LONGITUDE: 103°54'06.143" WEST, HAVING A NAVD 88 ELEVATION OF 2100.990. PROJECT ELEVATIONS ARE BASED ON GPS OBSERVATIONS DERIVED USING GEOD 12B HELD ON THE CONTROL POINT.

DISTANCES SHOWN ARE GRID DISTANCES, USE A COMBINED SCALE FACTOR OF 1.000158991 TO GET GROUND DISTANCES.

INFORMATION PROVIDED BY CLIENT AS SHOWN HEREON. DETAILS ATTACHED HERETO ARE MADE A PART THEREOF. COORDINATES SHOWN ARE NAD83.

PIPELINE	MATERIAL	PIPE SUMMARY		
		ITEM	DESCRIPTION	QUANTITY
		1	8" .188 W.T. MAINLINE PIPE FBE	1594'
		2	8" .277 W.T. BORE PIPE FBE+ARO	150'



SCALE & PROJECTION	
SCALE: 1" = 200' HORIZONTAL 1" = 100' VERTICAL PROJECTION: NAD 83 NORTH DAKOTA STATE PLANE, NORTH ZONE, US FOOT	

CRITICAL DRAWING		
Revision	Description	Date
D	ADD APPROXIMATE EXISTING GULLIKSON PRIVATE WATERLINE	1/14/2025
C	UPDATE SECTION 4 BORE STRING AREA	1/10/2025
B	EXTEND BORES	12/23/2024
A	PROPOSED	12/17/2024

NOTES	

HILAND CRUDE, L.L.C.

ENGINEERING SURVEYING PLANNING

1515 9TH STREET, STE A, ROCK SPRINGS, WY 82901
307.362.6065 | 866.938.3088 | www.whsmithpc.com

GULLIKSON REROUTE TIE-IN
8" CRUDE PIPELINE
SHEET 9 OF 9
160+00.00 TO 177+43.73
SECTIONS 29, 32 & 33, T152N R103W,
SECTION 4, T151N R103W, 5TH P.M.
MCKENZIE COUNTY, NORTH DAKOTA

Status:	PROPOSED	
State:	NORTH DAKOTA	PIN No:
County:	MCKENZIE	Scale:
Category:	1"=200'	
File Name:	GULLIKSON REROUTE TIE-IN ALIGNMENT PLAN.dwg	
Drawing No:	GULLIKSON REROUTE TIE-IN-PRO-001	Rev

Exhibit B – Project Maps

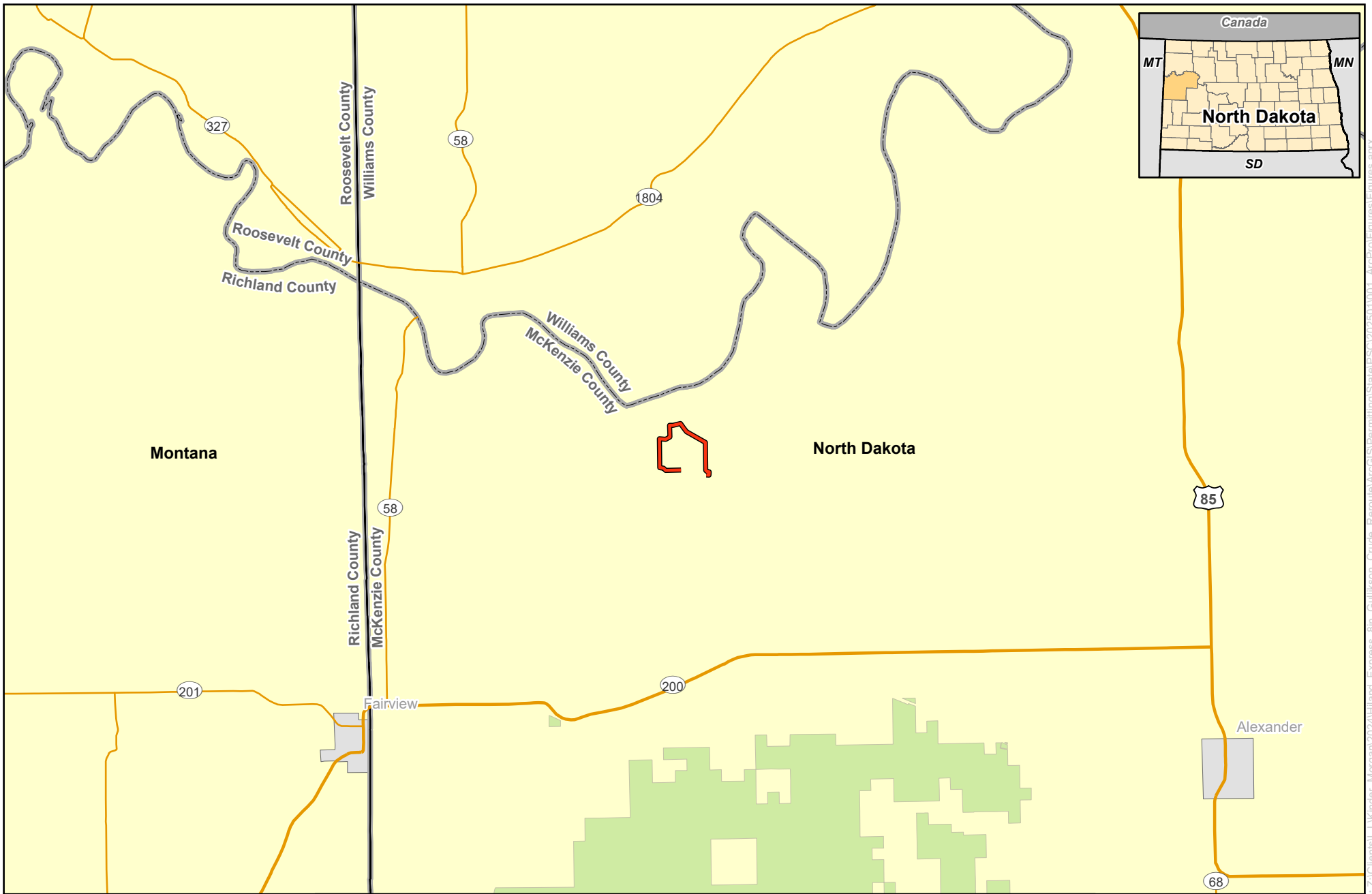
B.1 Project Overview

B.2 Avoidance and Exclusion Maps

B.3 Land Use/Land Cover Maps

B.4. Selection Criteria (Other) Maps

B.5 Black and White Map for Publications

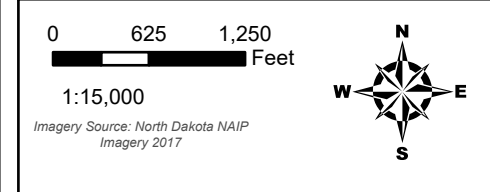
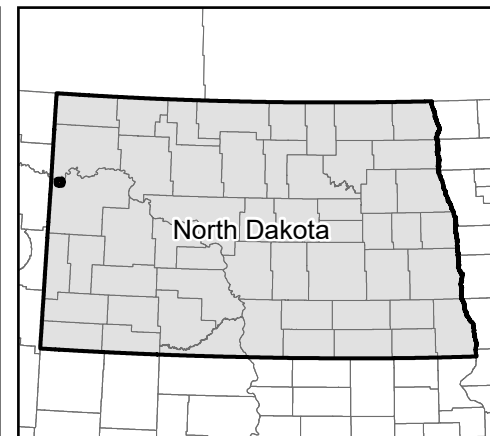
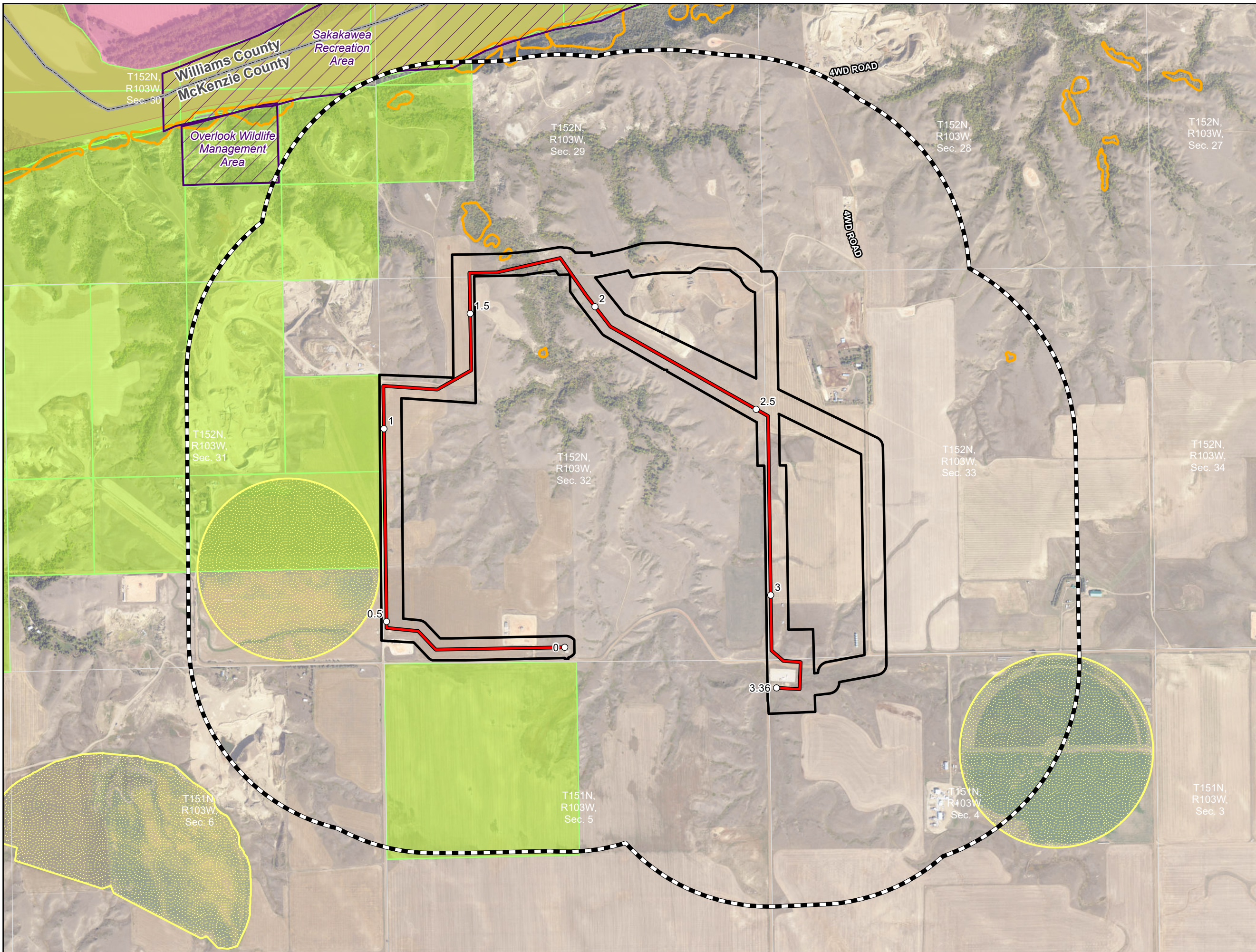


0 1.5 3 Miles
1:180,000

merjent.
For Environmental Review Purposes Only

Exhibit B.1 Hiland Crude, LLC Gullickson Reroute Pipeline Project Overview

- Proposed Pipeline
- Forest Service Land (USFS)



- Milepost
 - Proposed Pipeline
 - ▭ Project Corridor
 - ▭ 1-mile Study Area
 - NDDTL - Mineral Trust Land
 - ▭ Section Boundary
- Avoidance Area**
- Surficial Aquifer
 - Irrigated Land
 - Landslide Deposit
 - Protected Area

Exhibit B.2
Hiland Crude, LLC
Gullickson Reroute
Pipeline Project

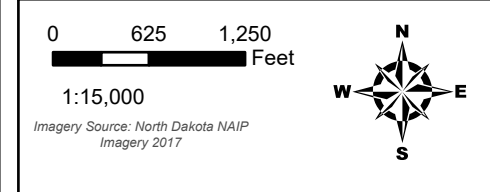
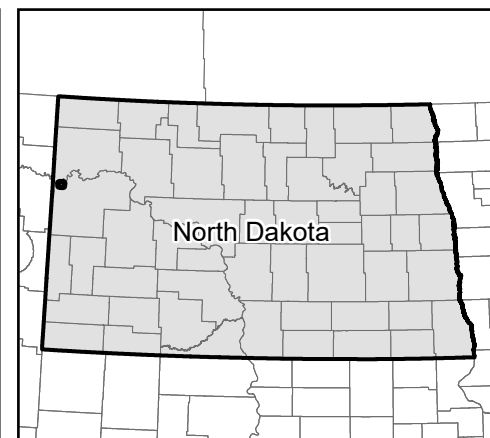
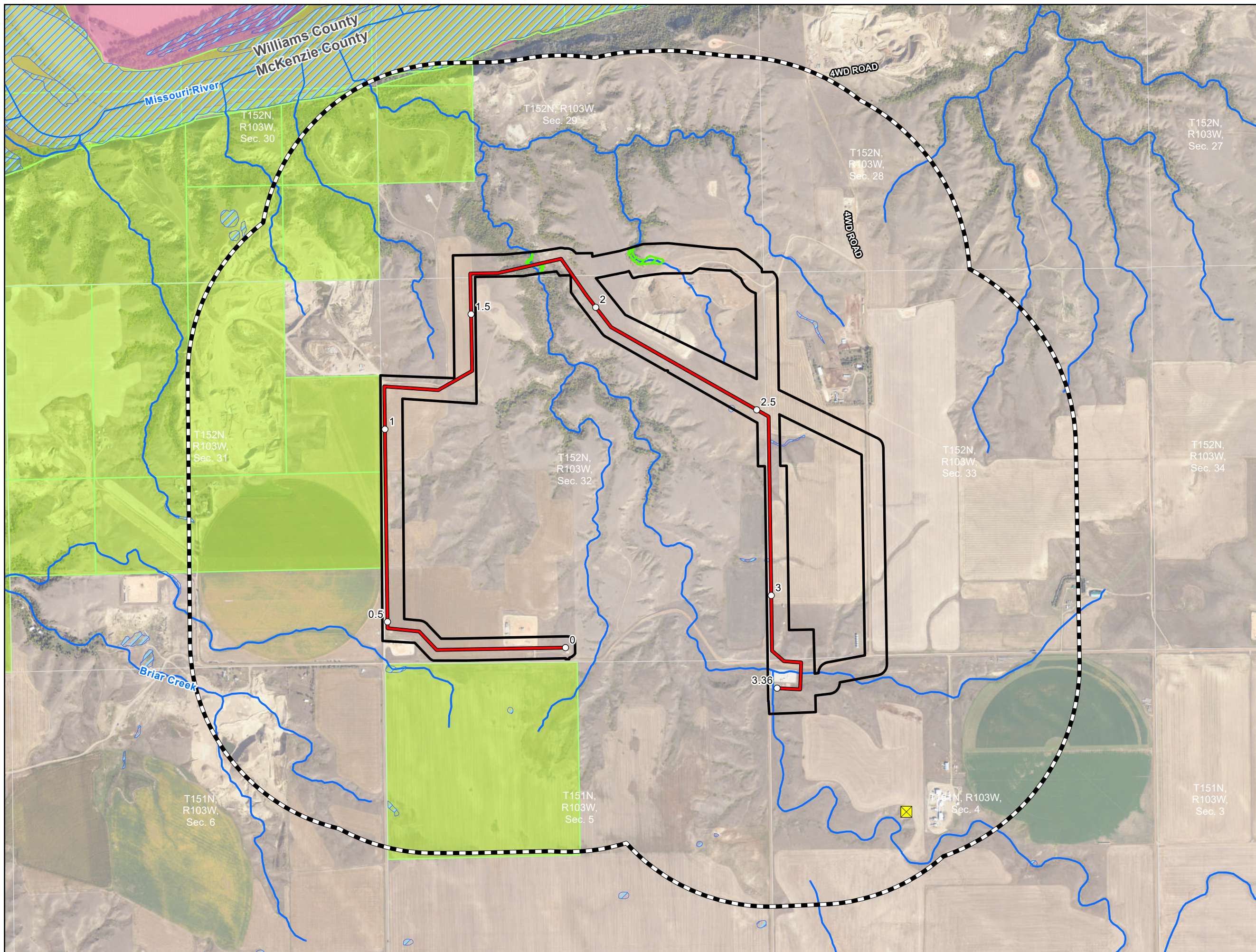
Avoidance and Exclusion Maps

McKenzie County, ND

merjent.

For Environmental Review Purposes Only 2/4/2025

Source: Z:\Clients\T_L\Kinner_Morgan\2024\Hiland_Crude_Gullickson_Reroute\ArcGIS\Permitting\State\PSC\202501001_ArcPro\Figures\Figures.aprx



- Milepost
- Proposed Pipeline
- ▭ Project Corridor
- ▭ 1-mile Study Area
- ⊠ Microwave Station
- NHD Flowline
- ▨ NWI Wetland
- ▨ Field Delineated Wetland
- ▨ NDDTL - Mineral Trust Land
- ▨ Surficial Aquifer
- ▭ Section Boundary
- ▭ County Boundary

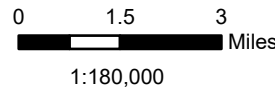
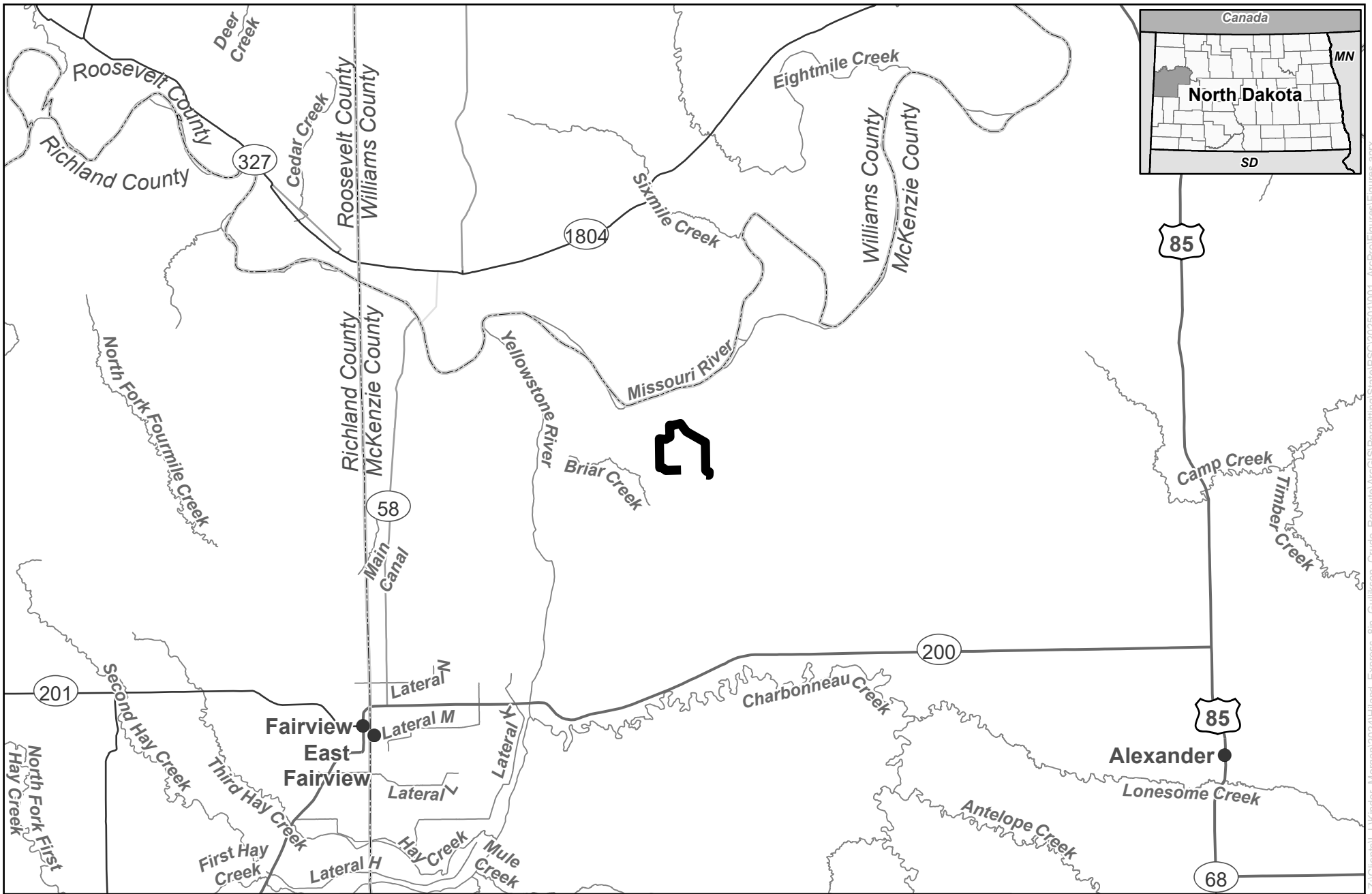
**Exhibit B.4
Hiland Crude, LLC
Gullickson Reroute
Pipeline Project**

Selection Criteria (Other) Maps

McKenzie County, ND



Date: (2/4/2025) Source: Z:\Clients\LLK\Hilander_Morgan\2024\Hiland_Express_BfM_Gullickson_Chude_Reroute\ArcGIS\Permitting\State\PSC\202501001_ArcPro\Figures\Figures.aprx



For Environmental Review Purposes Only

Exhibit B.5
Hiland Crude, LLC
Gullickson Reroute Pipeline Project
Project Location Map

Preferred Route

Source: Z:\Clients\11\Kvinder_Morgan2024\Hiland_Crude_Gullickson_ArcGIS\Permitting\State\IP-SC202501001_ArcPro\Figures\Figures.aprx Date: (2/14/2025)

New 8" Crude Pipeline – 3.4miles

New 8" pipeline routed around landowner that did not want another pipeline across her land

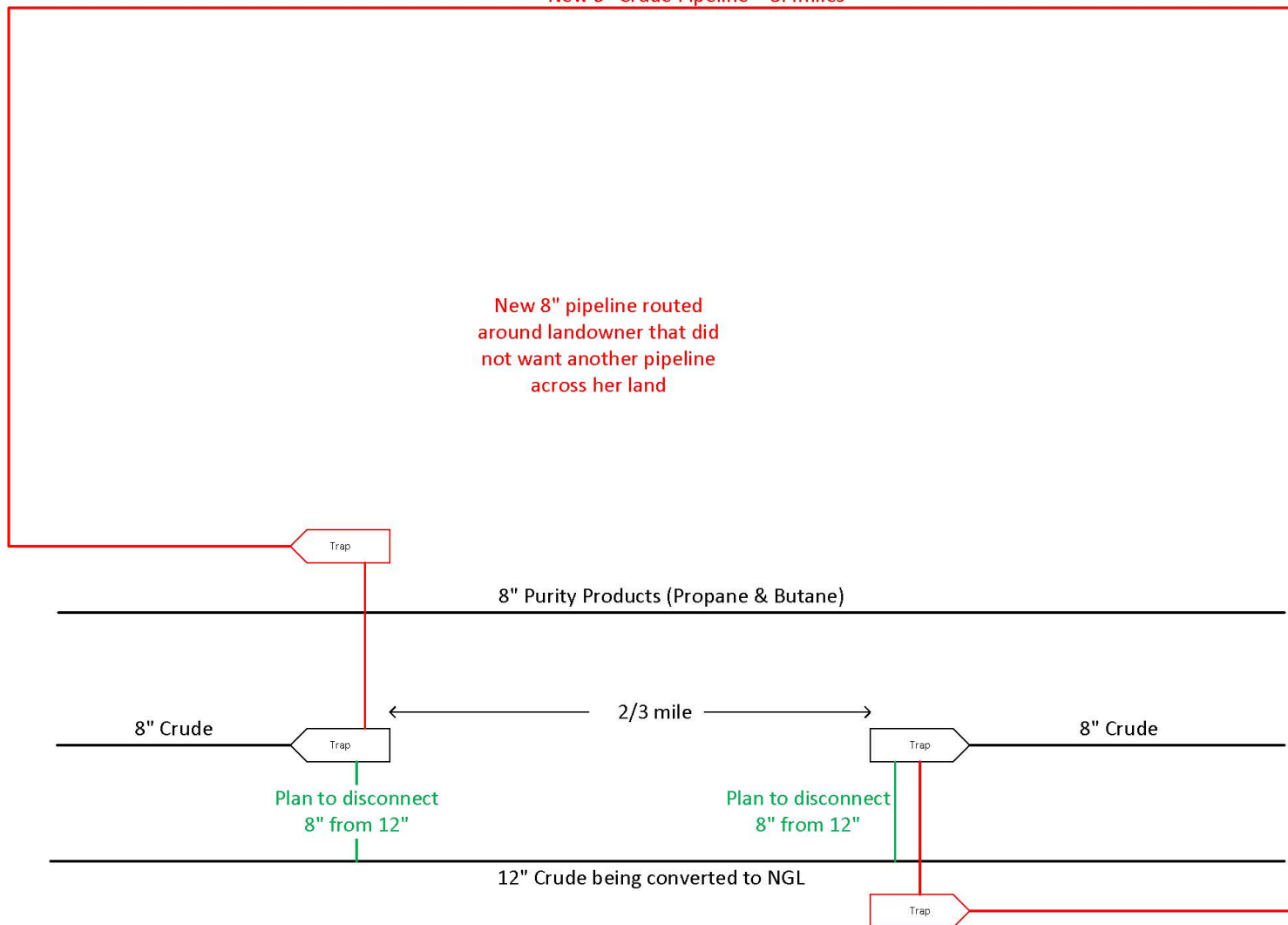


Exhibit B.6
Hiland Crude, LLC
Gullickson Reroute Pipeline Project
Pipeline Reroute Diagram

Exhibit C

Natural Resources Survey Report

**Natural Resources Inventory Report for the
Hiland Crude Gullickson Reroute Pipeline Project
McKenzie County, North Dakota**



Prepared for:

Merjent, Inc.

1 Main Street Southeast, Suite 300
Minneapolis, Minnesota 55414

Prepared by:

Chad Tucker, Erica Matykiewicz, and Nick Hill

Western EcoSystems Technology, Inc.
4007 State Street, Suite 109
Bismarck, North Dakota 58503

January 8, 2025



REPORT PARTICIPANTS

Chad Tucker	Project Manager
Erica Matykiewicz	Associate Biologist
Nick Hill	Associate Biologist
Joshua Zalewski	Technical Editor

REPORT REFERENCE

Tucker, C., E. Matykiewicz, and N. Hill. 2024. Natural Resources Inventory Report for the Hiland Crude Gullickson Reroute Pipeline Project McKenzie County, North Dakota. Prepared for Merjent, Inc., Minneapolis, Minnesota. Prepared by Western EcoSystems Technology, Inc. (WEST), Bismarck, North Dakota. January 8, 2025.

TABLE OF CONTENTS

1	INTRODUCTION.....	1
2	PROCEDURES	4
2.1	Wetland and Waterbody Field Determination.....	4
2.2	Federally Listed Wildlife Species Evaluation.....	4
2.3	Nesting Raptor Survey.....	5
2.4	Noxious Weed Inventory.....	5
2.5	Tree and Shrub Inventory	5
3	RESULTS.....	6
3.1	Wetlands and Waterbodies.....	6
3.2	Threatened and Endangered Species Habitat Assessment	6
3.2.1	Northern Long-eared Bat	6
3.2.2	Whooping Crane.....	7
3.2.3	Dakota Skipper	9
3.2.4	Piping Plover.....	9
3.2.5	Rufa Red Knot	10
3.2.6	Western Regal Fritillary.....	11
3.2.7	Monarch Butterfly.....	11
3.3	Nesting Raptor Survey.....	11
3.4	Noxious Weed Inventory.....	11
3.5	Tree and Shrub Inventory	12
4	LITERATURE CITED	13

LIST OF TABLES

Table 1.	Legal descriptions of the Project.	1
Table 2.	Federally listed threatened and endangered species.	5
Table 3.	North Dakota State and Project County listed noxious and invasive weeds.	5
Table 4.	Wetlands documented within the Survey Corridor.....	6
Table 5.	Northern long-eared bat (NLEB) habitat within the Survey Corridor.	7
Table 6.	Results of the tree and shrub inventory.....	12

LIST OF FIGURES

Figure 1. Location of the proposed Hiland Crude Gullickson Reroute Pipeline. 2
Figure 2. Detailed view of the proposed Hiland Crude Gullickson Reroute Pipeline..... 3
Figure 3. Known sightings, species range, and designated critical habitats in relation to the
proposed Hiland Crude Gullickson Reroute Pipeline..... 8

LIST OF APPENDICES

Appendix A. US Army Corps of Engineers Wetland Determination Data Forms
Appendix B. Natural Resource Inventory Figures
Appendix C. Project Field Photographs
Appendix D. Tree and Shrub Inventory

ACRONYMS AND ABBREVIATIONS

ac	acre
DASK	Dakota Skipper
DBH	diameter at breast height
ESA	Endangered Species Act
Final Rule	<i>Endangered and Threatened Wildlife and Plants; Endangered Species Status for Northern Long-Eared Bats; Final Rule</i>
ft	foot
IPaC	Information for Planning and Consultation
kV	kilovolt
m	meter
mi	mile
N	north
NLEB	Northern long-eared bat
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
PEMC	Palustrine emergent seasonally flooded
PLSS	Public Land Survey System
Project	Hiland Express Gullickson Pipeline Project
R	Range
ROW	Right-of-way
Sec.	Section
Survey Corridor	300-ft corridor centered on Focus Route (209.7 acres)
T	Township
USACE	US Army Corps of Engineers
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
W	west
WEST	Western EcoSystems Technology, Inc.
WMD	Wetland Management District
WNS	White-nose syndrome

1 INTRODUCTION

Hiland Crude LLC (Hiland Crude) proposes to construct the Hiland Crude Gullickson Reroute Pipeline (Project). Western EcoSystems Technology, Inc. (WEST), was retained by Merjent to provide natural resources inventory services, which include the identification of waterbody/wetland boundaries, an evaluation of habitat for federally listed species, a line-of-sight raptor nest survey, a noxious weed inventory, and a tree and shrub inventory. The proposed Project is within McKenzie County, North Dakota. The Project is located 12.6 miles (mi) northwest of the town of Alexander, North Dakota and is 3.4 mi in length (Figure 1). Table 1 identifies the Public Land Survey System Sections within which the Project is located.

Table 1. Legal descriptions of the Project.

Section(s)	Township	Range
4	151	103
29, 32, 33	152	103

Hiland Crude considered multiple route alignments to minimize impacts to cultural and natural resources. The natural resources discussed in this report include all areas surveyed for the Project. The Survey Corridor is 300 feet (ft) wide in most areas and contains 209.5 acres (ac). The pedestrian field surveys took place on September 19 and October 22, 2024.

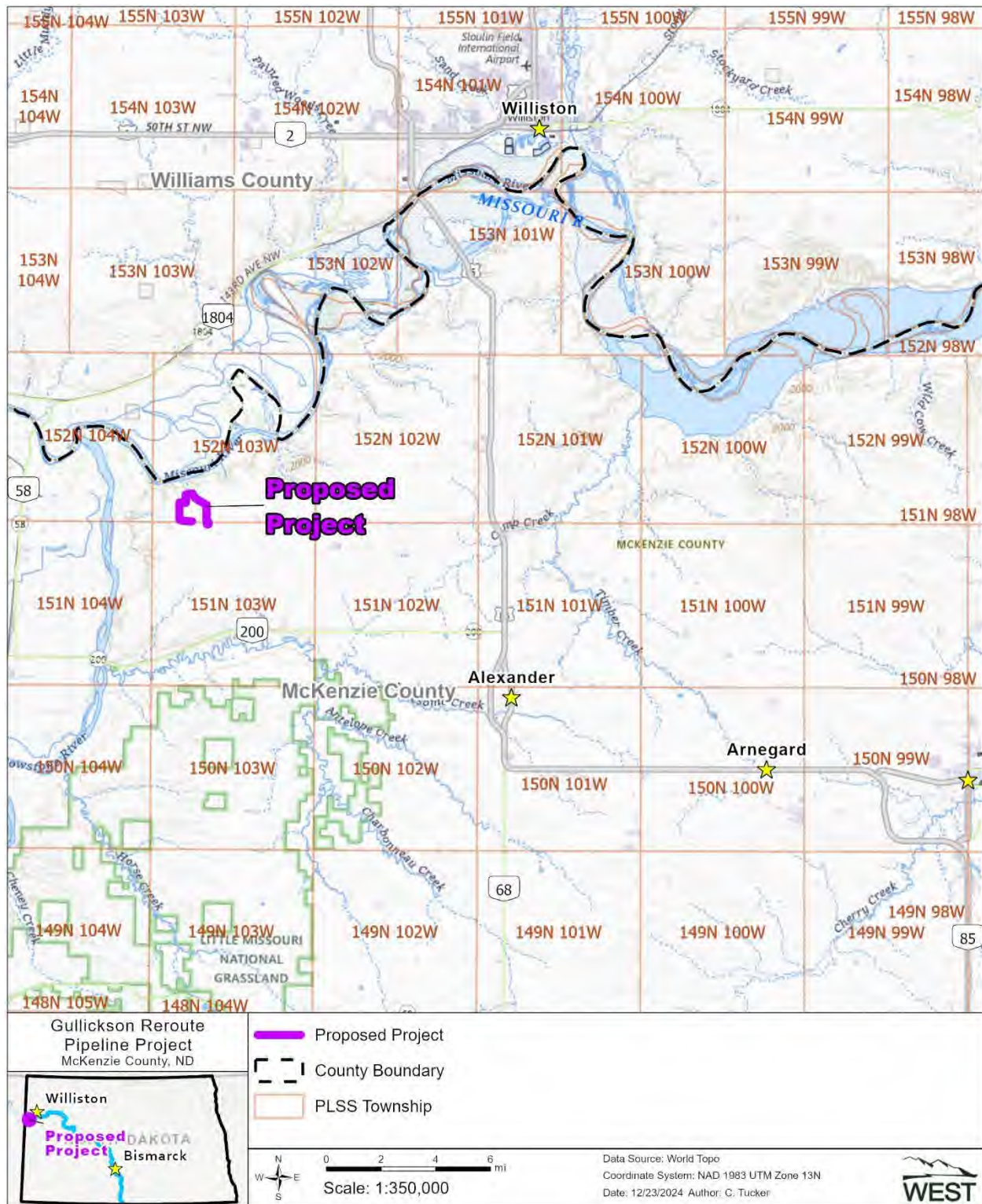


Figure 1. Location of the proposed Hiland Crude Gullickson Reroute Pipeline.

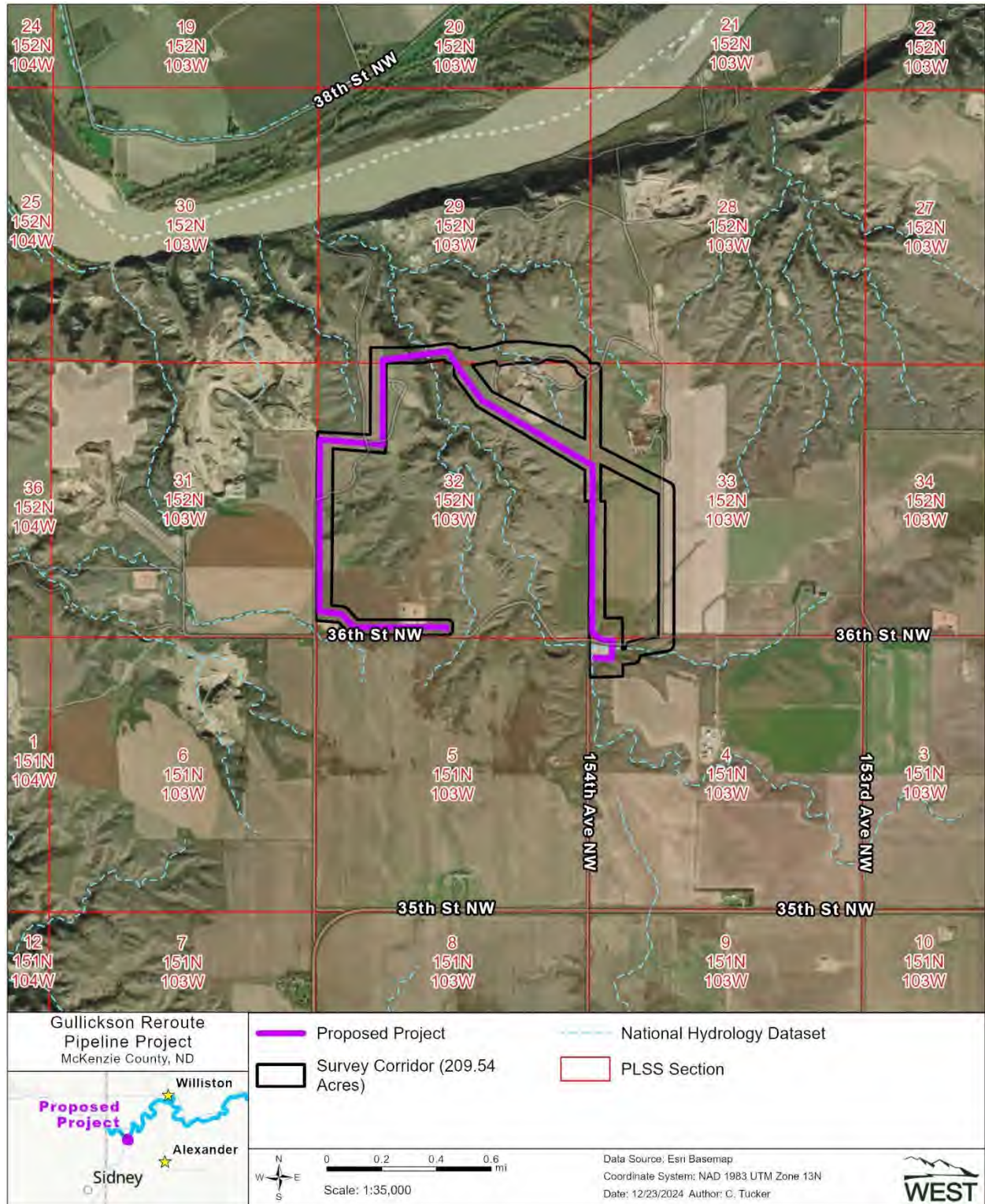


Figure 2. Detailed view of the proposed Hiland Crude Gullickson Reroute Pipeline.

2 PROCEDURES

2.1 Wetland and Waterbody Field Determination

Wetland identification utilized the presence of hydrophytic vegetation and landscape hydrology and/or topographic position. Wetland boundary mapping utilized US Army Corps of Engineers (USACE) guidance from the 1987 *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains* (Version 2.0; USACE 2010). Waterbody boundaries were recorded utilizing the criteria and definitions provided by the USACE *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams – Interim Version* (USACE 2022a) and revised definition of “*Waters of the United States*” (USEPA 2023). Wetlands and waterbodies were field classified in accordance with guidelines set forth in the *Classification of Wetlands and Deepwater Habitats of the United States* by the Federal Geographic Data Committee (2013). The following resources were reviewed prior to the wetland field determination to aid in identifying potential wetlands within the Survey Corridor: McKenzie County National Agriculture Imagery Program (NAIP) aerial photographs (US Geological Survey [USGS] 2023); US Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI; USFWS NWI 2021); USGS National Hydrography Dataset (USGS 2023); and the US Department of Agriculture Natural Resources Conservation Service (USDA NRCS) digital Web Soil Survey (USDA NRCS 2024). The vegetation within the area surveyed was characterized using the hydrophytic criteria outlined in the *National Wetland Plant List* (USACE 2022b).

A pre-survey review of the USFWS NWI database signatures within the Survey Corridor was conducted (USFWS NWI 2024). During the field survey, each signature within the Survey Corridor was investigated. Hydric and upland observation points were recorded at each wetland. Upland observation points were recorded at NWI signatures that do not meet wetland criteria. For each observation point, vegetation and hydrology characteristics were recorded on a USACE Great Plains Region data form. Soil data was not collected due to landowner negotiations and proximity to existing underground utilities. The data forms are included in Appendix A.

2.2 Federally Listed Wildlife Species Evaluation

The USFWS Information for Planning Consultation (IPaC) tool was used to review federally listed species that have the potential to be impacted by the Project (USFWS 2024a). The review also included the USFWS designated critical habitat for threatened and endangered species geospatial data (2023a), along with known range, reported occurrences, and habitat needs for each species. Table 2 identifies the federally listed species with the potential for occurrence within the Survey Corridor. Field evaluations were conducted on September 19 and October 22, 2024, to confirm the presence or absence of potentially suitable habitat for federally listed species within the Project Survey Area. A line-of-sight survey for nesting raptors and potentially suitable piping plover nesting habitat was conducted from the Project Survey Area and publicly accessible roads. Background data was collected for preliminary review and to aid in the field inventory of biological resources.

Table 2. Federally listed threatened and endangered species.

Common Name	Scientific Name	Status
Northern long-eared bat	<i>Myotis septentrionalis</i>	Endangered
Whooping crane	<i>Grus americana</i>	Endangered
Dakota skipper	<i>Hesperia dacotae</i>	Threatened
Piping plover	<i>Charadrius melodus</i>	Threatened
Rufa red knot	<i>Calidris canutus rufa</i>	Threatened
Western regal fritillary	<i>Argynnis idalia occidentalis</i>	Proposed threatened
Monarch butterfly	<i>Danaus plexippus</i>	Proposed threatened

Source: US Fish and Wildlife Service 2024a.

2.3 Nesting Raptor Survey

A 0.5-mi line-of-sight pedestrian survey from the Survey Corridor and publicly accessible roads for nesting raptors was conducted. The surveyors utilized 10x magnification binoculars to scan trees and wooded areas from either the Survey Corridor or public roads. The North Dakota Game and Fish Department’s (NDGF) eagle nest database was also reviewed.

2.4 Noxious Weed Inventory

North Dakota has 13 state-listed noxious weed species. The McKenzie County Weed Control District lists four additional species as invasive (North Dakota Department of Agriculture 2024). Table 3 provides a list of noxious and/or invasive weed species listed for the Project.

Table 3. North Dakota State and Project County listed noxious and invasive weeds.

North Dakota State Listed Noxious Weeds		Project County Invasive Weeds	
Common Name	Scientific Name	Common Name	Scientific Name
Absinth wormwood	<i>Artemisia absinthium</i>	McKenzie County	
Canada thistle	<i>Cirsium arvense</i>	Baby’s breath	<i>Gypsophila paniculata</i>
Dalmatian toadflax	<i>Linaria genistifolia</i>	Black henbane	<i>Hyoscyamus niger</i>
Diffuse knapweed	<i>Centaurea diffusa</i>	Common burdock	<i>Arctium minus</i>
Houndstongue	<i>Cynoglossum officinale</i>	Halogeton	<i>Halogeton glomeratus</i>
Leafy spurge	<i>Euphorbia esula</i>		
Musk thistle	<i>Carduus nutans</i>		
Palmer amaranth	<i>Amaranthus palmeri</i>		
Purple loosestrife	<i>Lythrum salicaria</i>		
Russian knapweed	<i>Acroptilon repens</i>		
Saltcedar	<i>Tamarix chinensis</i>		
Spotted knapweed	<i>Centaurea maculosa</i>		
Yellow toadflax	<i>Linaria vulgaris</i>		

2.5 Tree and Shrub Inventory

A tree and shrub inventory was conducted within the Survey Corridor, and included species considered non-native. The location, number, and species of each tree and shrub was documented for this inventory. The trees were enumerated by individual count and dense shrub patches were typically estimated using a sample plot to extrapolate the numbers of individual plants.

3 RESULTS

3.1 Wetlands and Waterbodies

A pre-survey review of the USFWS NWI database identified three wetland signatures and one riverine signature within the Survey Corridor (USFWS NWI 2024). The field survey identified two wetlands, covering 1.06 ac, within the Survey Corridor. Both wetlands were field classified as palustrine emergent seasonally flooded (PEMC) wetlands. Three of the NWI wetland signatures were found to not exhibit wetland hydrology or contain hydric vegetation. Upland points were recorded at these sites to document that the features had been surveyed and lacked wetland characteristics. The field identified wetlands are located at the NWI riverine signatures. Attributes for the wetlands are listed in Table 4. No waterbodies were identified during the field survey.

Table 4. Wetlands documented within the Survey Corridor.

Name	Classification	Location	Acres
Wetland 1	PEMC	Sec. 29, T152N, R103W	0.23
Wetland 2	PEMC	Sec. 29, T152N, R103W	0.83
Total			1.06

N = north; PEMC = palustrine emergent seasonally flooded; R = range;
Sec = section; T = township; W = west.

The recorded wetland features and observation points are depicted in Appendix B and field photographs are included in Appendix C.

3.2 Threatened and Endangered Species Habitat Assessment

Threatened and endangered species that have been documented and/or that have the potential to occur within the Survey Corridor are listed in Table 2 (USFWS 2024a). A review of USFWS species information datasets, along with habitat data gathered from the field surveys, were used to aid in the determinations. Threatened and endangered species information gathered from the review is documented below in the individual species sections.

During the field surveys, no federally listed species were observed. Numerous treed areas (more than three inches [in] diameter at breast height [DBH]) with the potential to provide summer roosting habitat for the northern long-eared bat were documented.

3.2.1 Northern Long-eared Bat

The northern long-eared bat (*Myotis septentrionalis*) is a forest-dwelling mammal. The home range of the northern long-eared bat (NLEB) is approximately 150 ac, including a summer and winter habitat. In the summer, NLEB roost under bark or in crevices of trees, preferring to roost in tall trees with greater than three in DBH, and under the exfoliating bark of dead or dying trees. In the winter, NLEB hibernate in caves and mines. The NLEB prefers foraging in edge habitats and forests comprising trees with a diversity of life stages (USFWS 2014a).

Occurrences of the NLEB are uncertain in North Dakota. White-nose syndrome (WNS) currently remains the predominant threat to NLEB. North Dakota is included in the current extent of WNS

zone per the *Endangered and Threatened Wildlife and Plants; Endangered Species Status for Northern Long-Eared Bat; Final Rule* (Final Rule; 88 Federal Register [FR] 4908 [January 26, 2023]; USFWS 2023b). With the Final Rule reclassifying the NLEB as endangered, incidental take of the species is prohibited. To avoid incidental take, it is recommended to conduct tree clearing activities between November 1 and April 14 when bats have either migrated or are hibernating in underground caves (USFWS 2024e).

Ten patches, totaling 6.07 ac of potential habitat for the northern long-eared bat in the form of trees, are present within the Survey Corridor. No habitat for the NLEB in the form of a hibernacula is present on the Survey Area. Table 5 lists the attributes of the habitat polygons and Appendix B shows the locations of the habitat.

Table 5. Northern long-eared bat (NLEB) habitat within the Survey Corridor.

NLEB Habitat	Location	Acres
NLEB 1	Sec. 32, T152N, R103W	0.05
NLEB 2	Sec. 29, T152N, R103W	1.10
NLEB 3	Sec. 29, T152N, R103W	3.30
NLEB 4	Sec. 29, T152N, R103W	0.12
NLEB 5	Sec. 29, T152N, R103W	0.18
NLEB 6	Sec. 29, T152N, R103W	0.09
NLEB 7	Sec. 29, T152N, R103W	1.23
NLEB 8	Sec. 29, T152N, R103W	<0.01
NLEB 9	Sec. 29, T152N, R103W	<0.01
NLEB 10	Sec. 29, T152N, R103W	<0.01

N = north; R = range; Sec. = section; T = township; W = west.

3.2.2 Whooping Crane

The primary nesting area for the whooping crane (*Grus americana*) is in Canada’s Wood Buffalo National Park. Aransas National Wildlife Refuge in Texas is the primary wintering area for whooping cranes. In the spring and fall, the cranes migrate, primarily along the Central Flyway. During the migration, whooping cranes make numerous stops, roosting in relatively large, shallow marshes, and feeding and loafing in harvested grain fields. The primary threats to whooping cranes are power lines, illegal hunting, and habitat loss (USFWS 2023c).

The whooping crane is federally listed and has the potential to occur in all counties of North Dakota. The Project is located within the migration corridor where 75–95% of whooping cranes travel. Land use within the Project is a mixture of cropland and oil/gas development. The USFWS database (USFWS 2022) has nine verified whooping crane sightings in McKenzie County. The closest confirmed sighting to the Project was of four adult cranes in 2010, approximately 2.0 mi south of the Project in Sec. 17, T151N, R103W. The sighting locations are depicted on Figure 3. The wetlands within the Survey Corridor are unlikely to provide habitat for the whooping crane due to topography and height of surrounding vegetation; however, agriculture fields within the Survey Corridor may provide foraging and loafing areas for migrating whooping cranes.

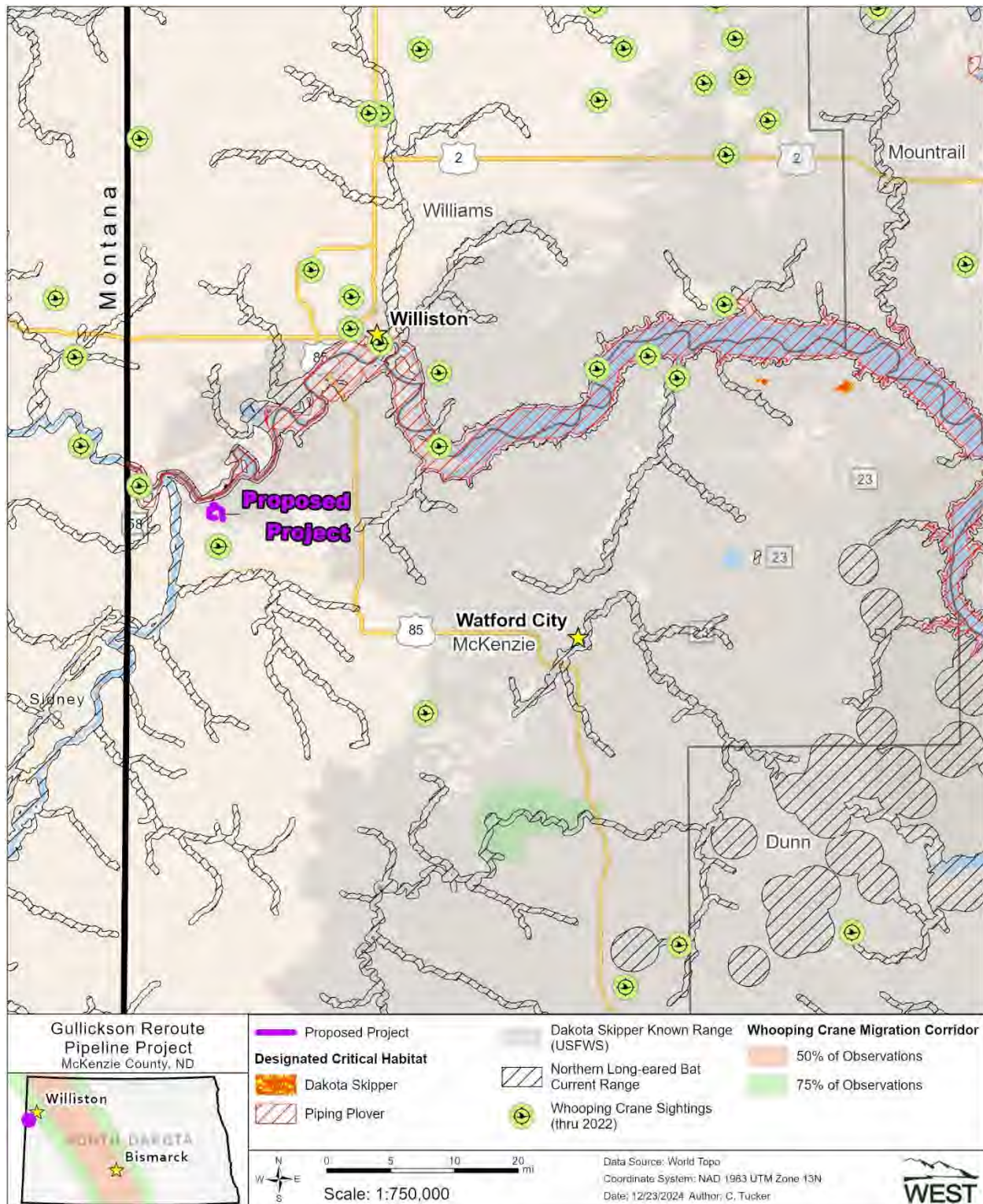


Figure 3. Known sightings, species range, and designated critical habitats in relation to the proposed Hiland Crude Gullickson Reroute Pipeline.

3.2.3 *Dakota Skipper*

The Dakota skipper (DASK; *Hesperia dacotae*), a prairie obligate species, requires nectar-producing native flowers and native grasses. Historically, DASK have been associated with relatively low, wet, prairie-dominated, high-quality, tall grass prairie habitat (Type A habitat). Researchers have found that DASK also use upland mixed-grass prairie that is relatively dry and includes ridges and hillsides (Type B habitat; USFWS 2013a). These habitats often have small inclusions of areas with species more commonly typified with tall grass prairie. Larvae require grass components of mixed-grass prairie that include bluestem grasses (*Andropogon* spp.) and needlegrasses, while adults require nectar sources; therefore, suitable prairie must include nectar-producing forbs. These forbs may include purple coneflower (*Echinacea purpurea*), blue bells (*Campanula rotundifolia*), blanket flower (*Gaillardia aristata*), wood lily (*Lilium philadelphicum*), or other species that are in bloom during the adult life cycle of the DASK (Dana 1991). The nearest USFWS designated critical habitat for the DASK is located approximately 43 mi northeast of the Project (Figure 3). The species is known to occur in McKenzie County, and the Project is within the USFWS's known range of the DASK (USFWS 2023a).

A desktop assessment of habitat within the surveyed portion of the Survey Corridor was used to divide habitat into one of two basic habitat groups: grassland habitat and unsuitable habitat. The assessment identified 91.18 ac (44%) of grassland habitat and 118.52 ac (56%) of unsuitable habitat. The field survey was conducted within the identified grassland habitat to determine if suitable habitat was present. Suitable habitat is defined as native grassland that contains one or more primary constituent elements for the skipper to complete its entire life cycle, including breeding, feeding/foraging, and sheltering behaviors (USFWS 2023d). The field survey did not identify suitable habitat within the Survey Corridor.

The grassland areas within the Survey Corridor were identified as unsuitable habitat for the Dakota skipper. The grasslands are dominated by non-native grasses smooth brome (*Bromus inermis*) and crested wheatgrass (*Agropyron cristatum*). Patches of western snowberry (*Symphoricarpos occidentalis*) are also prevalent throughout.

3.2.4 *Piping Plover*

The piping plover (*Charadrius melodus*) is a migratory shorebird that breeds and nests in North Dakota, typically between April 15 and August 15. Suitable nesting habitat for piping plovers includes alkaline wetlands and the shoreline of the Missouri River system; this habitat has been characterized as sparsely vegetated channel sandbars, sand and gravel beaches on islands, temporary pools on sandbars and islands, and island margins that interface with the river channel. The piping plover feeds on worms, insects, and mollusks. The decline of piping plover populations is due to the loss of habitat from river impoundment(s), as well as the degradation of habitat related to the channelization of river systems, nest predation, and human disturbance (USFWS 1985).

Critical habitat for the Northern Great Plains piping plover has been designated on alkali lakes and wetlands, the Yellowstone River, and Missouri River in North Dakota. The physical and biological features that are essential to the conservation of the species, referred to as the primary

constituent elements, require special consideration for protection. These features include sparsely vegetated alkaline wetlands, sand and gravel beaches on islands, temporary pools on sandbars and islands, and island margins that interface with the river channel. The northern portion of the Project is approximately 0.5 mi from the nearest critical habitat, the Missouri River. The field survey documented that the wetlands within the Survey Corridor are densely vegetated and do not provide bare ground suitable for nesting habitat. Furthermore, no potential habitat was seen from the Survey Corridor or from public roads within 1/2-mi of the Survey Corridor. The Project is not within line-of-sight of the Missouri River.

3.2.5 *Rufa Red Knot*

The red knot (*Calidris canutus*) is a shorebird that breeds in the central Canadian Arctic, with primary breeding grounds in Nunavut, but some potential breeding habitat extending into the Northwest Territories (USFWS 2013b). The rufa red knot (*C. canutus rufa*) winters along the Atlantic coasts of Argentina and Chile (particularly the island of Tierra del Fuego), the north coast of Brazil, and further north into Mexico and the southeast US (USFWS 2014b). During migration, the rufa red knot primarily follows the Atlantic coastline to and from breeding and wintering grounds. However, geolocator results from red knots wintering in Texas showed that a comparatively small population of birds migrate using the Central Flyway across the Midwestern US and may have a northern Great Plains stopover (USFWS 2013b). Rufa red knots spend two to three months annually on the breeding grounds located in northern Canada.

Red knots are specialized molluscivores, feeding primarily on hard-shelled mollusks in relatively soft, wet sand/sediment (USFWS 2014b). In addition to mollusks, red knots may feed upon shrimp, crabs, marine worms, horseshoe crab (*Limulus* spp.) eggs, and other similar invertebrates. On the breeding grounds, rufa red knots feed mostly on terrestrial invertebrates and grass shoots and seeds (USFWS 2013b).

The shoreline of the Missouri River provides stopover habitat for red knots utilizing a midcontinental migratory route during annual migrations. However, this species is rare and is not reported in North Dakota every year. Reported historical sightings since 1900 (Igl 2015) are primarily composed of single individuals or relatively small flocks; however, on rare occasions, larger flocks have been reported. Many of these sightings have been made in the prairie pothole region during the spring migration in late April through May. An increase in future sightings may result from an increase in public awareness.

The red knot migrates twice annually from its breeding grounds in the Arctic to wintering habitat in southern climates. It does not nest in North Dakota but may use areas along the Missouri River as stopover habitat. The northern portion of the Project is approximately 0.5 mi from the Missouri River. The Survey Corridor does not have suitable shoreline stopover habitat for the rufa red knot, and the Project is not within line-of-sight of the Missouri River.

3.2.6 *Western Regal Fritillary*

The USFWS has proposed that the western regal fritillary (*Argynnis idalia occidentalis*) be listed as threatened under the Endangered Species Act (ESA). The species is found in 14 states, including North Dakota, and most of the Survey Corridor lies within the USFWS's known range for the species (USFWS, 2024b).

Designation of critical habitat is not yet determined. The species utilizes native grasslands with tall vegetation and flowering plants. Violet species (*Viola spp.*) are the sole food source for western regal fritillary larvae and are therefore a key component of larval habitat (USFWS 2024a).

The field survey was conducted within identified grassland habitat to determine if suitable habitat for the western regal fritillary was present. For the purpose of the field survey, suitable habitat was defined as native dominant grassland containing flowering species. The field survey did not identify suitable habitat within the Survey Corridor. The grassland areas within the Survey Corridor were identified as unsuitable habitat dominated by non-native grasses smooth brome and crested wheatgrass. Patches of western snowberry were also prevalent throughout.

3.2.7 *Monarch Butterfly*

The monarch butterfly (*Danaus plexippus*) is currently proposed to be listed as threatened under the ESA. A public comment period is open from December 12, 2024, to March 12, 2025. The ESA final rule is expected to be issued within 12 months of the end of the public comment period. Protections would not apply until the effective date of the final rule.

The species occurs throughout the Great Plains and much of North America. Monarchs prefer open habitats with flowering plants and lay their eggs exclusively on milkweeds (*Asclepias spp.*), which the larvae feed on until pupation (US Forest Service [USFS] 2021). Monarch butterflies will breed in North Dakota during the summer and migrate south to Mexico for the winter; eventually, the butterflies will make their way back to North Dakota during spring migration. Suitable habitat, upland grassland habitat with flowering species, was observed during the field survey. Much of the herbaceous habitat is rangeland used for livestock grazing or grasslands in roadside ditches. Due to the presence of suitable habitat, it is possible for this species to occur within the Survey Corridor.

3.3 **Nesting Raptor Survey**

No raptor nests were documented during the line-of-sight field survey. The nearest eagle nest in the NDGF database is a bald eagle nest along the Missouri River approximately three miles northeast of the Project (NDGF 2024).

3.4 **Noxious Weed Inventory**

No state- or county-listed noxious weeds were recorded during the field surveys.

3.5 Tree and Shrub Inventory

The inventory documented 1,052 trees and shrubs in total. Green ash (*Fraxinus pennsylvanica*) was the most common species at 366 stems. Common juniper (*Juniperus communis*) was the next most common species at 164 stems. Other native species documented included Rocky Mountain juniper (*J. scopulorum*) at 120 stems, water birch (*Betula occidentalis*) at 92 stems, fragrant sumac (*Rhus aromatica*) at 91 stems, chokecherry (*Prunus virginiana*) at 79 stems, silver buffaloberry (*Shepherdia argentea*) at 75 stems, American elm (*Ulmus americana*) at 21 stems, quaking aspen (*Populus tremuloides*) at 13 stem, red osier dogwood (*Cornus sericea*) at 11 stems and eastern cottonwood (*Populus deltoides*) at 10 stems. Two non-native species were also documented including Russian olive (*Elaeagnus angustifolia*) at nine stems and Siberian elm (*Ulmus pumila*) at one stem. Table 6 summarizes the data, and Appendix D contains the point and polygon attributes. Locations of the identified trees and shrubs are displayed in Appendix B.

Table 6. Results of the tree and shrub inventory.

Species	Status	Count
American elm	Native	21
Chokecherry	Native	79
Common juniper	Native	164
Eastern cottonwood	Native	10
Fragrant sumac	Native	91
Green ash	Native	366
Quaking aspen	Native	13
Red osier dogwood	Native	11
Rocky Mountain juniper	Native	120
Russian olive	Non-native	9
Siberian elm	Non-native	1
Wilver buffaloberry	Native	75
Water birch	Native	92
	Total	1,052

4 LITERATURE CITED

- Dana, R. 1991. Conservation Management of the Prairie Skippers *Hesperia dacotae* and *Hesperia ottoe*. University of Minnesota. Station Bulletin 594-1991 (AD-SB=5511-S). Minnesota Agricultural Experiment Station. 74 pp.
- Esri. 2024. World Imagery and Aerial Photos (World Topo). ArcGIS Resource Center. Environmental Systems Research Institute (Esri), producers of ArcGIS software, Redlands, California. Accessed August 2024. Available online: <https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=10df2279f9684e4a9f6a7f08febac2a9>
- Federal Geographic Data Committee (FGDC). 2013. Classification of Wetlands and Deep-Water Habitats of the United States. FGDC-STD-004-2013. Second Edition. Wetlands Subcommittee, FGDC and US Fish and Wildlife Service, Washington, D.C.
- Igl, L. 2015. Observations of Red Knots in North Dakota, List of records of Red Knots in North Dakota since the early 1900's. US Geological Survey Northern Prairie Research Center. Jamestown, North Dakota. 3 pp.
- North Dakota Department of Agriculture (NDDA). 2024. Noxious Weeds. Accessed November 2024. Available online: <https://www.ndda.nd.gov/divisions/plant-industries/noxious-weeds>
- North Dakota Game and Fish Department (NDGF). 2024. Personal communication with Conservation Biologist, Sandra Johnson. November 19, 2024.
- US Army Corps of Engineers (USACE). 1987. 1987 Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1 (on-line edition). Wetlands Research Program. Prepared by Environmental Laboratory, USACE, Vicksburg, Mississippi. January 1987. Available online: <https://usace.contentdm.oclc.org/digital/collection/p266001coll1/id/4532/>
- US Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region. (Version 2.0). ERDC/EL TR-10-1. Wetlands Regulatory Assistance Program, USACE, Vicksburg, Mississippi. November 2010. Available online at: <https://usace.contentdm.oclc.org/utills/getfile/collection/p266001coll1/id/7594>
- US Army Corps of Engineers (USACE). 2022a. National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams – Interim Version. US Army Corps of Engineers, Washington, DC, November 2022.
- US Army Corps of Engineers. (USACE). 2022b National Wetland Plant List, Version 3.6. U.S. Army Engineer Research and Development Center, Vicksburg MS.
- US Environmental Protection Agency (USEPA). 2023. Definition of "Waters of the United States": Rule Status and Litigation Update. Current Implementation of Waters of the United States. Last updated on May 12, 2023. Available online: <https://www.epa.gov/wotus/definition-waters-united-states-rule-status-and-litigation-update>
- US Fish and Wildlife Service (USFWS). 1985. Endangered and Threatened Wildlife and Plants; Determination of Endangered and Threatened Status for Piping Plover; Final Rule. Department of the Interior Fish and Wildlife Service. 50 Federal Register 50726. December 11, 1985.
- US Fish and Wildlife Service (USFWS). 1990. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Pallid Sturgeon; Final Rule. 50 CFR Part 17. Department of the Interior Fish and Wildlife Service. 55 Federal Register 36641. September 6, 1990.

- US Fish and Wildlife Service (USFWS). 2007. Pallid Sturgeon (*Scaphirhynchus albus*) 5-year Review Summary and Evaluation. USFWS Pallid Sturgeon Recovery Coordinator, Billings, Montana. Available online: <http://pallidsturgeon.org/bibliographies/pallid-sturgeon-scaphirhynchus-albus-5-year-review-summary-and-evaluation/>
- US Fish and Wildlife Service (USFWS). 2013a. Endangered and Threatened Wildlife and Plants; Threatened Status for Dakota Skipper and Endangered Status for Poweshiek Skipperling; Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Dakota Skipper and Poweshiek Skipperling; Proposed Rules. Department of Interior Fish and Wildlife Service. 50 CFR Part 17. 78 Federal Register 63574. October 24, 2013.
- US Fish and Wildlife Service (USFWS). 2013b. Endangered and Threatened Wildlife and Plants; Proposed Threatened Status for the Rufa Red Knot (*Calidris canutus rufa*). Proposed Rule. Department of the Interior Fish and Wildlife Service. 78 Federal Register 60024. September 30, 2013.
- US Fish and Wildlife Service (USFWS). 2014a. Northern Long-Eared Bat Interim Conference and Planning Guidance. USFWS Regions 2, 3, 4, 5, and 6. January 6, 2014. Available online: <https://efiling.web.commerce.state.mn.us/edockets/searchDocuments.do?method=showPoup&documentId={3AC05753-A500-4D07-B26F-7F0CA662CA8E}&documentTitle=20177-133472-02>
- US Fish and Wildlife Service (USFWS). 2014b. Endangered and Threatened Wildlife and Plants; Threatened Species Status for the Rufa Red Knot; Final Rule. 50 CFR Part 17. Department of the Interior Fish and Wildlife Service. 79 Federal Register 73706. December 11, 2014.
- US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI). 2021. National Wetlands Inventory Data Mapper. USFWS NWI Fort Snelling, Minnesota. Updated November 31, 2021. Accessed April 2023. Available online: <https://www.fws.gov/wetlands/Data/Mapper.html>
- US Fish and Wildlife Service. (USFWS). 2022. Confirmed whooping crane sightings in the Central Flyway through fall migration 2022. Unpublished data from the Cooperative Whooping Crane Tracking Project database. Nebraska Field Office, USFWS, Grand Island, Nebraska.
- US Fish and Wildlife Service (USFWS). 2023a. Critical Habitat for Threatened & Endangered Species. Critical Habitat Portal metadata, USFWS. Updated June 2, 2023. Available online: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>
- US Fish and Wildlife Service (USFWS). 2023b. Endangered and Threatened Wildlife and Plants: Endangered Species Status for Northern Long-Eared Bat: Delay of Effective Date. Department of Interior Fish and Wildlife Service. 50 CFR Part 17. 88 Federal Register 4908. January 26, 2023. Available online: <https://www.govinfo.gov/content/pkg/FR-2023-01-26/pdf/2023-01656.pdf>
- US Fish and Wildlife Service (USFWS). 2023c. Whooping Crane (*Grus americana*). Species Profile. USFWS Environmental Conservation Online System (ECOS). Accessed June 2023. Available online: <https://ecos.fws.gov/ecp/species/758>
- US Fish and Wildlife Service (USFWS). 2023d. Email correspondence with Luke Tosso, acting North Dakota Field Office Supervisor. June 1, 2023.
- US Fish and Wildlife Service (USFWS). 2024a. Endangered and Threatened Wildlife and Plants; Endangered Status for the Eastern Regal Fritillary, and Threatened Status with Section 4(d) Rule for the Western Regal Fritillary. Department of the Interior Fish and Wildlife Service. 50 CFR Part 17. August 6, 2024. Available online: <https://www.govinfo.gov/content/pkg/FR-2024-08-06/pdf/2024-16982.pdf>

US Fish and Wildlife Service. (USFWS). 2024b. Complete Species Current Range. Data from the Environmental Conservation Online System (ECOS). USFWS. Available online: <https://ecos.fws.gov/ecp/>

US Fish and Wildlife Service (USFWS). 2024c. Initial Project Scoping: IPaC - Information for Planning and Consultation. IPaC, Environmental Conservation Online System (ECOS), USFWS. Accessed July 2024. Available online: <https://ipac.ecosphere.fws.gov/>

US Fish and Wildlife Service (USFWS). 2024e. USFWS Timing/Buffer Recommendations. North Dakota Ecological Services Field Office. January 2024.

US Forest Service (USFS). 2021. Monarch Butterfly Habitat Needs. US Department of Agriculture, USFS, Washington D.C. Accessed May 2022. Available online: https://www.fs.fed.us/wildflowers/pollinators/Monarch_Butterfly/habitat/

US Geological Survey (USGS). 2023. The National Map. TNM Download V2.0. Topo Map data, 3DEP products, Lidar, IfSAR, NHD (Hydrography Dataset), NAIP Plus Imagery, National Structures Dataset. Accessed April 2023. Available online: <https://apps.nationalmap.gov/downloader/#/>

Appendix A. US Army Corps of Engineers Wetland Determination Data Forms

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: WP-01
 Investigator(s): NH CB Section, Township, Range: Sec 29-T152N-R103W
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 1
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.95007 Long: -103.89645 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				
1. <u>Spartina pectinata</u>	50	Yes	FACW	
2. <u>Schoenoplectus pungens</u>	50	Yes	OBL	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
100 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
% Bare Ground in Herb Stratum <u> </u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 50 x 1 = 50
 FACW species 50 x 2 = 100
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 0 x 5 = 0
 Column Totals: 100 (A) 150 (B)
 Prevalence Index = B/A = 1.50

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: WP-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6</u> Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: WP-02
 Investigator(s): NH CB Section, Township, Range: Sec 29-T152N-R103W
 Landform (hillside, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 5
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.95022 Long: -103.89065 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: PEMC
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u>X</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>X</u> No <u> </u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Fraxinus pennsylvanica</u>	100	Yes	FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
2. _____				
3. _____				
4. _____				
100 =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>50</u> x 1 = <u>50</u> FACW species <u>50</u> x 2 = <u>100</u> FAC species <u>100</u> x 3 = <u>300</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>200</u> (A) <u>450</u> (B) Prevalence Index = B/A = <u>2.25</u>
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ =Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Schoenoplectus tabernaemontani</u>	50	Yes	OBL	
2. <u>Alopecurus pratensis</u>	50	Yes	FACW	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
100 =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u>
1. _____				
2. _____				
_____ =Total Cover				
% Bare Ground in Herb Stratum _____				

Remarks:

SOIL

Sampling Point: WP-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> 1 cm Muck (A9) (LRR I, J) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Dark Surface (S7) (LRR G) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> High Plains Depressions (F16) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR F) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | (LRR H outside of MLRA 72 & 73) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6) | <input type="checkbox"/> Red Parent Material (F21) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Depleted Dark Surface (F7) | <input type="checkbox"/> Very Shallow Dark Surface (F22) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Redox Depressions (F8) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H) | <input type="checkbox"/> High Plains Depressions (F16) | ³ Indicators of hydrophytic vegetation and |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F) | (MLRA 72 & 73 of LRR H) | wetland hydrology must be present, |
| | | unless disturbed or problematic. |

Restrictive Layer (if observed):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

- | | |
|------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <u>Primary Indicators (minimum of one is required; check all that apply)</u> | <u>Secondary Indicators (minimum of two required)</u> |
| <input checked="" type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Surface Soil Cracks (B6) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | (where tilled) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input checked="" type="checkbox"/> FAC-Neutral Test (D5) |
| | <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F) |
| <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) | |
| (where not tilled) | |
| <input type="checkbox"/> Presence of Reduced Iron (C4) | |
| <input type="checkbox"/> Thin Muck Surface (C7) | |
| <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

Surface Water Present? Yes No Depth (inches): 4
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-01
 Investigator(s): NH CB Section, Township, Range: Sec 29-T152N-R103W
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 1
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.95005 Long: -103.89641 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u> 0 </u> (A) Total Number of Dominant Species Across All Strata: <u> 1 </u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0.0% </u> (A/B)
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				Prevalence Index worksheet: Total % Cover of: <u> </u> Multiply by: OBL species <u> 0 </u> x 1 = <u> 0 </u> FACW species <u> 0 </u> x 2 = <u> 0 </u> FAC species <u> 0 </u> x 3 = <u> 0 </u> FACU species <u> 0 </u> x 4 = <u> 0 </u> UPL species <u> 100 </u> x 5 = <u> 500 </u> Column Totals: <u> 100 </u> (A) <u> 500 </u> (B) Prevalence Index = B/A = <u> 5.00 </u>
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
<u>Herb Stratum</u> (Plot size: <u> 5ft </u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
% Bare Ground in Herb Stratum <u> </u>				

Remarks:

SOIL

Sampling Point: UP-01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-02
 Investigator(s): NH CB Section, Township, Range: Sec 29-T152N-R103W
 Landform (hillside, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope (%): 5
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.95018 Long: -103.89073 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u>30ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Fraxinus pennsylvanica</u>	<u>100</u>	<u>Yes</u>	<u>FAC</u>	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
_____	<u>100</u> =Total Cover	_____	_____	
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>100</u> x 3 = <u>300</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>100</u> x 5 = <u>500</u> Column Totals: <u>200</u> (A) <u>800</u> (B) Prevalence Index = B/A = <u>4.00</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
_____	=Total Cover	_____	_____	
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				Hydrophytic Vegetation Indicators: <u> </u> 1 - Rapid Test for Hydrophytic Vegetation <u> </u> 2 - Dominance Test is >50% <u> </u> 3 - Prevalence Index is ≤3.0 ¹ <u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <u> </u> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
_____	<u>100</u> =Total Cover	_____	_____	
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____	=Total Cover	_____	_____	
% Bare Ground in Herb Stratum <u> </u>				

Remarks:

SOIL

Sampling Point: UP-02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) (where not tilled) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-101
 Investigator(s): NH CB Section, Township, Range: Sec 32-T152N-R103W
 Landform (hillside, terrace, etc.): upland swale Local relief (concave, convex, none): flat Slope (%): 1
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.94611 Long: -103.88556 Datum: NAD 83
 Soil Map Unit Name: E3637D Zahl-Beisigl-Tally complex, 9-15% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u>X</u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
				=Total Cover
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
				=Total Cover
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				
1. <u>Bromus inermis</u>	50	Yes	UPL	
2. <u>Agropyron cristatum</u>	50	Yes	UPL	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
				100 =Total Cover
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
				=Total Cover
% Bare Ground in Herb Stratum <u> </u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 2 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 100 x 5 = 500
 Column Totals: 100 (A) 500 (B)
 Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: UP-101

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)
	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
	<input type="checkbox"/> Dark Surface (S7) (LRR G)
	<input type="checkbox"/> High Plains Depressions (F16)
	(LRR H outside of MLRA 72 & 73)
	<input type="checkbox"/> Reduced Vertic (F18)
	<input type="checkbox"/> Red Parent Material (F21)
	<input type="checkbox"/> Very Shallow Dark Surface (F22)
	<input type="checkbox"/> Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
---------------------------------------------------------------------------------	---------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	
(where not tilled)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-102
 Investigator(s): NH CB Section, Township, Range: Sec 33-T152N-R103W
 Landform (hillside, terrace, etc.): upland swale Local relief (concave, convex, none): concave Slope (%): 3
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.94316 Long: -103.88301 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: X
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
% Bare Ground in Herb Stratum <u> </u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 100 x 5 = 500
 Column Totals: 100 (A) 500 (B)
 Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: UP-102

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> (LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No _____
---------------------------------------------------------------------------------	------------------------------------------------

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> (where tilled)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where not tilled)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Thin Muck Surface (C7)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u> _____
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-103
 Investigator(s): NH CB Section, Township, Range: Sec 33-T152N-R103W
 Landform (hillside, terrace, etc.): upland swale Local relief (concave, convex, none): concave Slope (%): 3
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.93869 Long: -103.88330 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
% Bare Ground in Herb Stratum <u> </u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 100 x 5 = 500
 Column Totals: 100 (A) 500 (B)
 Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: UP-103

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>	<u>Secondary Indicators (minimum of two required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: _____

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Great Plains Region
 See ERDC/EL TR-10-1; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 9/19/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-105
 Investigator(s): NH CB Section, Township, Range: Sec 4-T151N-R103W
 Landform (hillside, terrace, etc.): upland swale Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.93437 Long: -103.87972 Datum: NAD 83
 Soil Map Unit Name: E3571F Wabek-Zahl complex, 9-35% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u> </u>		
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>		

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across All Strata: <u> 1 </u> (B)
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 0.0% </u> (A/B)
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u> 0 </u> x 1 = <u> 0 </u>
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u> 0 </u> x 2 = <u> 0 </u>
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u> 0 </u> x 3 = <u> 0 </u>
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u> 0 </u> x 4 = <u> 0 </u>
<u> </u> =Total Cover				UPL species <u> 100 </u> x 5 = <u> 500 </u>
				Column Totals: <u> 100 </u> (A) <u> 500 </u> (B)
				Prevalence Index = B/A = <u> 5.00 </u>
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Agropyron cristatum</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 2 - Dominance Test is >50%
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 3 - Prevalence Index is ≤3.0 ¹
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u> Problematic Hydrophytic Vegetation ¹ (Explain)
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> =Total Cover				
% Bare Ground in Herb Stratum <u> </u>				

Remarks:

SOIL

Sampling Point: UP-105

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> (LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No _____
---------------------------------------------------------------------------------	------------------------------------------------

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	(where tilled)
<input type="checkbox"/> Drift Deposits (B3)	(where not tilled)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes _____ No _____ Depth (inches): _____ Water Table Present? Yes _____ No _____ Depth (inches): _____ Saturation Present? Yes _____ No _____ Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u> _____
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: _____

Project/Site: Hiland Crude Gullickson Reroute Pipeline City/County: McKenzie Sampling Date: 10/22/2024
 Applicant/Owner: Hiland Crude LLC State: ND Sampling Point: UP-106
 Investigator(s): NH Section, Township, Range: Sec 32-T152N-R103W
 Landform (hillside, terrace, etc.): upland swale Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): LRR F, MLRA 54 Lat: 47.94447 Long: -103.88519 Datum: NAD 83
 Soil Map Unit Name: E3769B Temvik-Zahl complex, 3-6% slopes NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u> Hydric Soil Present? Yes <u> </u> No <u> </u> Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------

Remarks:

VEGETATION – Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
<u>Herb Stratum</u> (Plot size: <u>5ft</u>)				
1. <u>Bromus inermis</u>	<u>100</u>	<u>Yes</u>	<u>UPL</u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u>100</u> =Total Cover				
<u>Woody Vine Stratum</u> (Plot size: <u> </u>)				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
=Total Cover				
% Bare Ground in Herb Stratum <u> </u>				

Dominance Test worksheet:
 Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
 Total Number of Dominant Species Across All Strata: 1 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:
 Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 0 x 2 = 0
 FAC species 0 x 3 = 0
 FACU species 0 x 4 = 0
 UPL species 100 x 5 = 500
 Column Totals: 100 (A) 500 (B)
 Prevalence Index = B/A = 5.00

Hydrophytic Vegetation Indicators:
 1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is ≤3.0¹
 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No X

Remarks:

SOIL

Sampling Point: UP-106

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> 1 cm Muck (A9) (LRR I, J)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Coast Prairie Redox (A16) (LRR F, G, H)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Dark Surface (S7) (LRR G)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> High Plains Depressions (F16)
<input type="checkbox"/> Stratified Layers (A5) (LRR F)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	(LRR H outside of MLRA 72 & 73)
<input type="checkbox"/> 1 cm Muck (A9) (LRR F, G, H)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Redox Dark Surface (F6)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Dark Surface (F7)	<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Depressions (F8)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 2.5 cm Mucky Peat or Peat (S2) (LRR G, H)	<input type="checkbox"/> High Plains Depressions (F16)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR F)	(MLRA 72 & 73 of LRR H)	

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes <input type="checkbox"/> No <input type="checkbox"/>
---------------------------------------------------------------------------------	--------------------------------------------------------------------------------------

Remarks:

HYDROLOGY

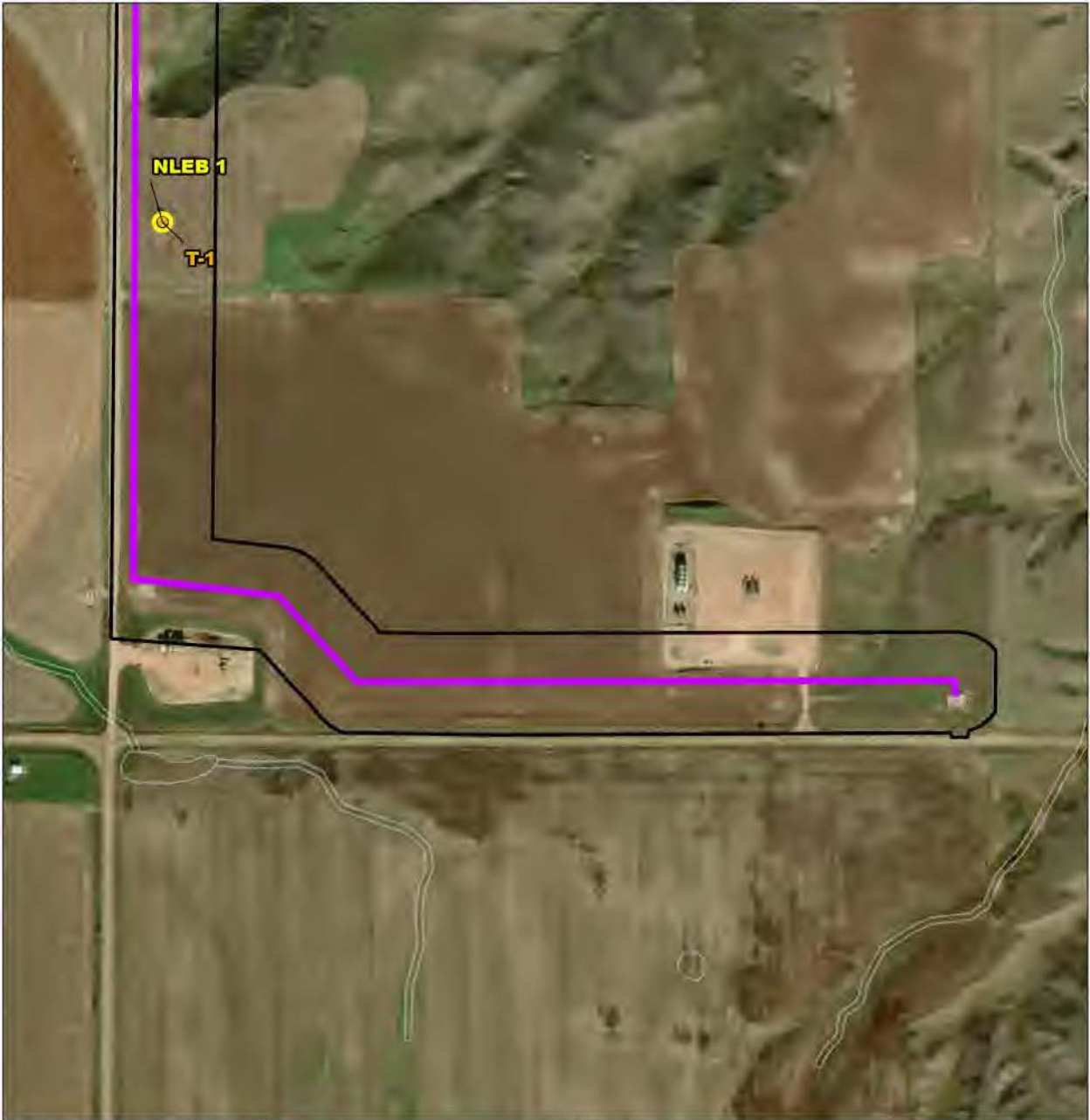
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) (where not tilled) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) (where tilled) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> FAC-Neutral Test (D5) <input type="checkbox"/> Frost-Heave Hummocks (D7) (LRR F)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:



Remarks:





Appendix B. Natural Resource Inventory Figures






Gullickson Reroute Pipeline Project
McKenzie County, ND



 Proposed Project
 Survey Corridor (209.5 Acres)
 NWI Signature

Field Survey Results
 Wetland
 Potential Northern Long-eared Bat Habitat
 Hydric Observation Point
 Upland Observation Point

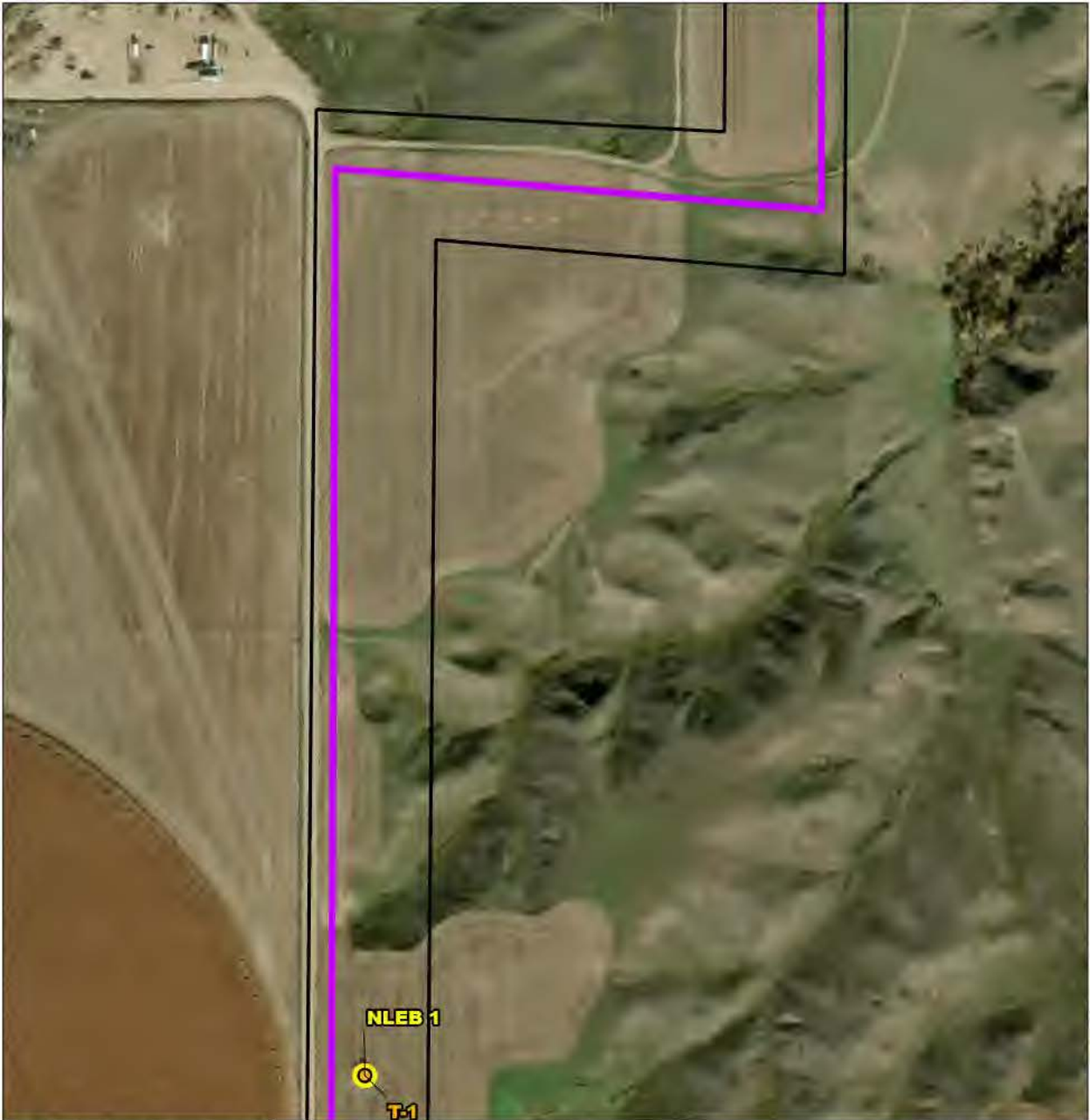
 Shrub Point
 Tree Point
 Tree / Shrub Polygon



Scale: 1:6,000






Data Source: World Imagery
 Coordinate System: NAD 1983 UTM Zone 13N
 Date: 12/23/2024 Author: C. Tucker

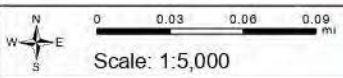




Gullickson Reroute Pipeline Project
McKenzie County, ND

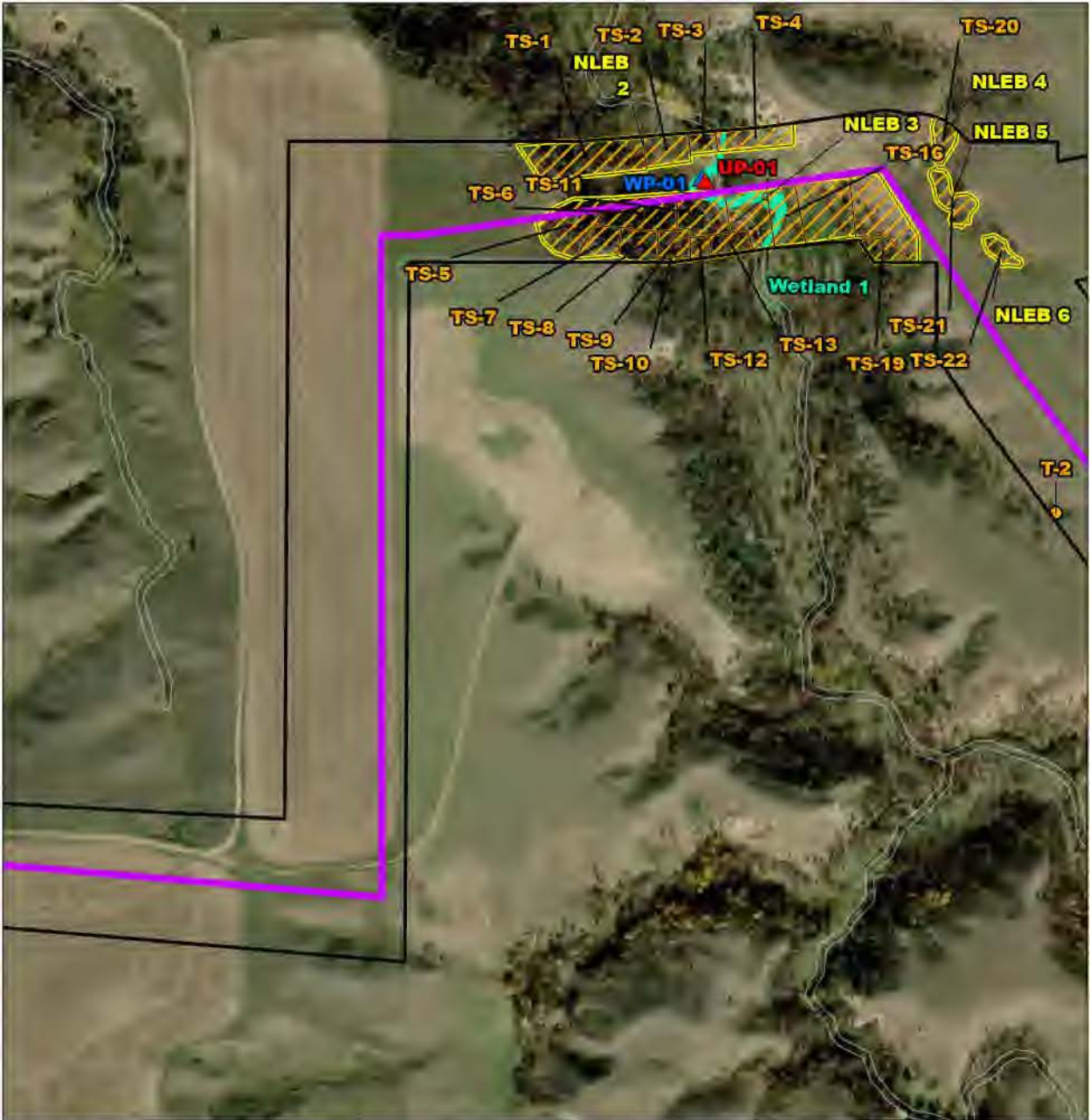


- | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">  Proposed Project  Survey Corridor (209.5 Acres)
NWI Signature | <p>Field Survey Results</p> <ul style="list-style-type: none">  Wetland  Potential Northern Long-eared Bat Habitat  Hydric Observation Point  Upland Observation Point | <ul style="list-style-type: none">  Shrub Point  Tree Point  Tree / Shrub Polygon |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Data Source: World Imagery
Coordinate System: NAD 1983 UTM Zone 13N
Date: 12/23/2024 Author: C. Tucker



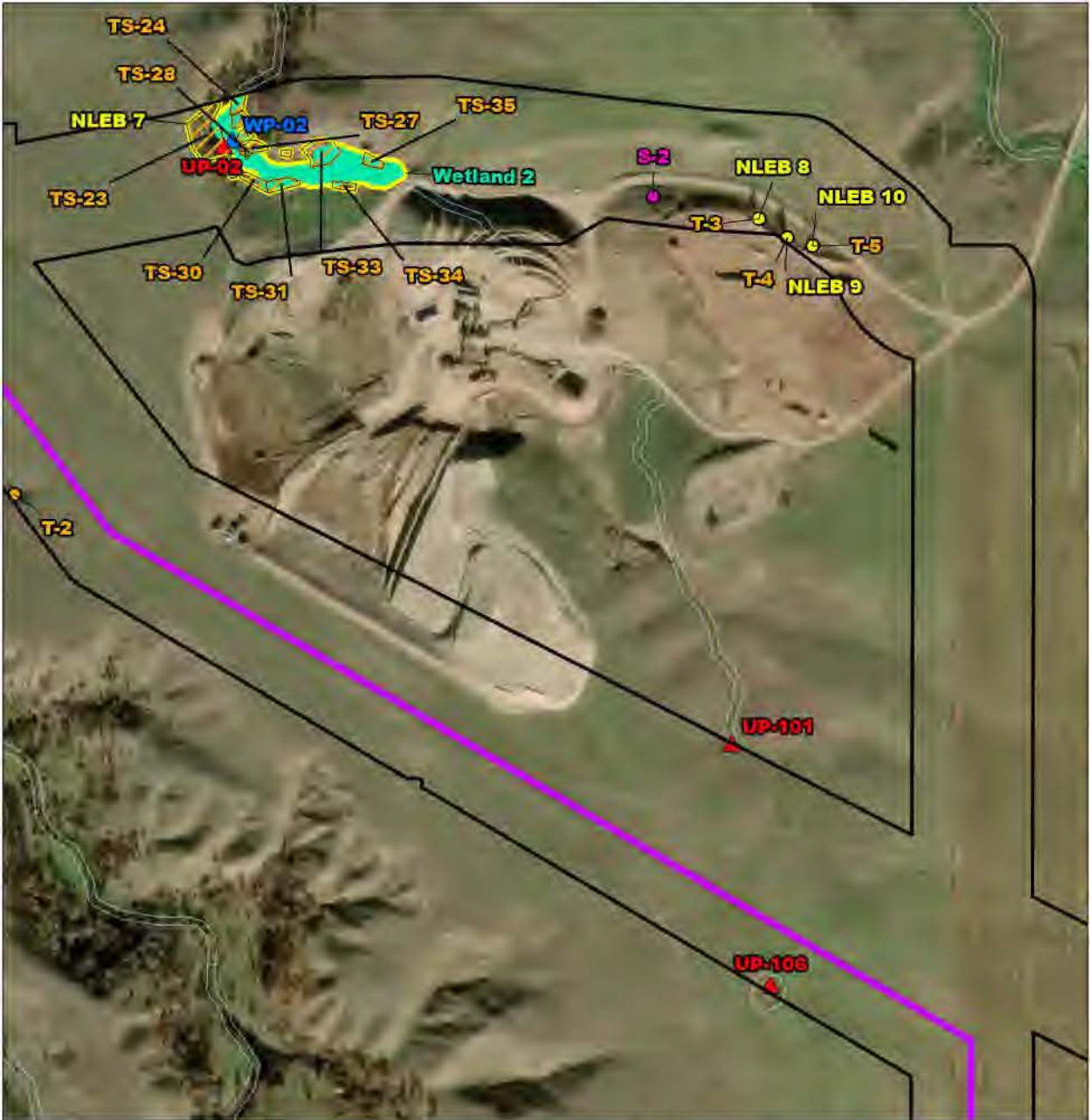


Gullickson Reroute Pipeline Project
McKenzie County, ND



<ul style="list-style-type: none"> Proposed Project Survey Corridor (209.5 Acres) NWI Signature 	<p>Field Survey Results</p> <ul style="list-style-type: none"> Wetland Potential Northern Long-eared Bat Habitat Hydric Observation Point Upland Observation Point 	<ul style="list-style-type: none"> Shrub Point Tree Point Tree / Shrub Polygon
<p>Scale: 1:5,000</p>		<p>Date Source: World Imagery Coordinate System: NAD 1983 UTM Zone 13N Date: 12/23/2024 Author: C. Tucker</p>

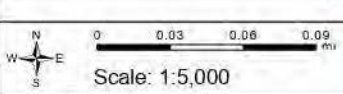




Gullickson Reroute Pipeline Project
McKenzie County, ND



- | | | |
|-------------------------------|-------------------------------------------|----------------------|
| Proposed Project | Wetland | Shrub Point |
| Survey Corridor (209.5 Acres) | Potential Northern Long-eared Bat Habitat | Tree Point |
| NWI Signature | Hydric Observation Point | Tree / Shrub Polygon |
| | Upland Observation Point | |





Data Source: World Imagery
Coordinate System: NAD 1983 UTM Zone 13N
Date: 12/23/2024 Author: C. Tucker












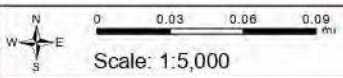
Gullickson Reroute Pipeline Project
McKenzie County, ND



-  Proposed Project
-  Survey Corridor (209.5 Acres)
NWI Signature

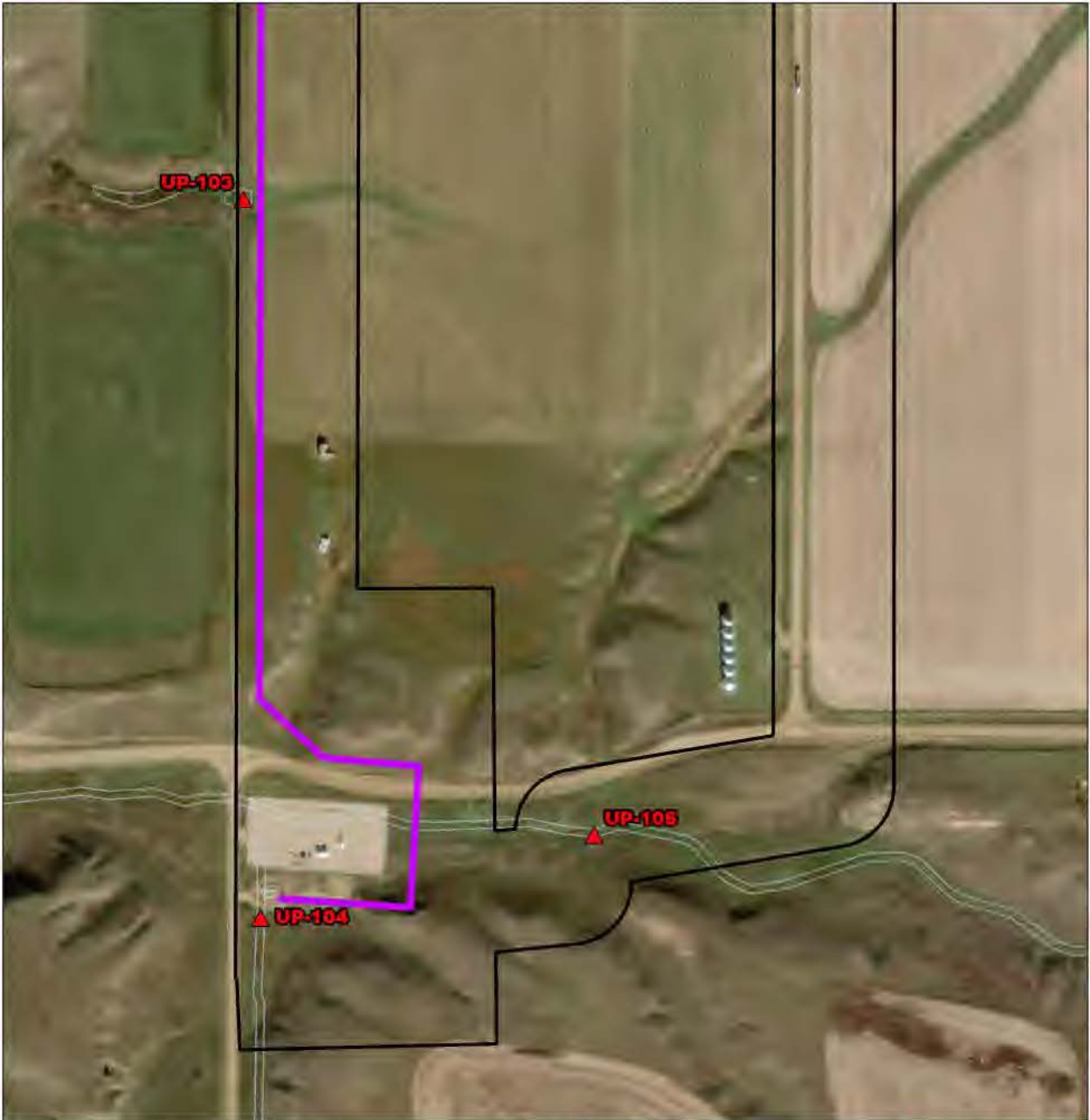
- Field Survey Results**
-  Wetland
 -  Potential Northern Long-eared Bat Habitat
 -  Hydric Observation Point
 -  Upland Observation Point

-  Shrub Point
-  Tree Point
-  Tree / Shrub Polygon






Data Source: World Imagery
Coordinate System: NAD 1983 UTM Zone 13N
Date: 12/23/2024 Author: C. Tucker












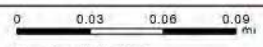
Gullickson Reroute Pipeline Project
McKenzie County, ND



-  Proposed Project
-  Survey Corridor (209.5 Acres)
-  NWI Signature

- Field Survey Results**
-  Wetland
 -  Potential Northern Long-eared Bat Habitat
 -  Hydic Observation Point
 -  Upland Observation Point

-  Shrub Point
-  Tree Point
-  Tree / Shrub Polygon



Scale: 1:5,000

Data Source: World Imagery
Coordinate System: NAD 1983 UTM Zone 13N
Date: 12/23/2024 Author: C. Tucker



Appendix C. Project Field Photographs



Photo 1. Photo of vegetation at wetland WP-02 located in the SE ¼ of Sec. 29-T152N-R103W.



Photo 2. Photo of vegetation at wetland WP-02 located in the SE ¼ of Sec. 29-T152N-R103W.



Photo 3. Grassland dominated by smooth brome and crested wheatgrass located in the NW ¼ of Sec. 32-T152N-R103W.



Photo 4. Grassland dominated by smooth brome located in the W ½ of Sec. 33-T152N-R103W.



Photo 5. Grassland dominated by smooth brome located in the SW ¼ of Sec. 33-T152N-R103W, North of 36th St N.



Photo 6. Grassland dominated by crested wheatgrass with western snowberry located in the NW ¼ of Sec. 5-T151N-R103W, South of 36th St N.

Appendix D. Tree and Shrub Inventory

Appendix C1. Tree and shrub point data.

Name	Location	Species 1	Count 1
Tree Point 1	Sec. 32, T152N, R103W	Siberian elm	1
Tree Point 2	Sec. 32, T152N, R103W	green ash	1
Tree Point 3	Sec. 29, T152N, R103W	eastern cottonwood	2
Tree Point 4	Sec. 29, T152N, R103W	eastern cottonwood	1
Tree Point 5	Sec. 32, T152N, R103W	eastern cottonwood	3
Shrub Point 1	Sec. 29, T152N, R103W	silver buffaloberry	1
Shrub Point 2	Sec. 33, T152N, R103W	chokecherry	4
Total			13

N = north; R = range; Sec. = section; T = township; W = west.

Appendix C2. Tree and shrub polygon data.

Polygon	Location	Acres	Species 1	Count 1	Species 2	Count 2	Species 3	Count 3
1	Sec. 29, T152N, R103W	0.59	green ash	50	Rocky Mountain juniper	30	common juniper	15
2	Sec. 29, T152N, R103W	0.19	green ash	23	Rocky Mountain juniper	4	common juniper	3
3	Sec. 29, T152N, R103W	0.08	Rocky Mountain juniper	9	green ash	14	common juniper	8
4	Sec. 29, T152N, R103W	0.23	Rocky Mountain juniper	30	green ash	15	Russian olive	5
5	Sec. 29, T152N, R103W	0.37	green ash	10	silver buffaloberry	8	common juniper	17
6	Sec. 29, T152N, R103W	0.35	green ash	8	water birch	19	chokecherry	6
7	Sec. 29, T152N, R103W	0.15	silver buffaloberry	6	common juniper	4	Rocky Mountain juniper	2
8	Sec. 29, T152N, R103W	0.17	water birch	19	Rocky Mountain juniper	5	common juniper	10
9	Sec. 29, T152N, R103W	0.12	water birch	12	chokecherry	4	green ash	7
10	Sec. 29, T152N, R103W	0.02	Rocky Mountain juniper	4	green ash	2	common juniper	19
11	Sec. 29, T152N, R103W	0.30	green ash	12	silver buffaloberry	4	fragrant sumac	3
12	Sec. 29, T152N, R103W	0.06	common juniper	16	chokecherry	4	green ash	5
13	Sec. 29, T152N, R103W	0.12	silver buffaloberry	7	common juniper	12	Rocky Mountain juniper	3
14	Sec. 29, T152N, R103W	0.31	green ash	10	Rocky Mountain juniper	2	water birch	1
15	Sec. 29, T152N, R103W	0.01	red osier dogwood	6	fragrant sumac	3		
16	Sec. 29, T152N, R103W	0.26	green ash	11	chokecherry	9	fragrant sumac	8
17	Sec. 29, T152N, R103W	0.46	American elm	2	green ash	8	Rocky Mountain juniper	7
18	Sec. 29, T152N, R103W	0.48	common juniper	7	fragrant sumac	26	chokecherry	1
19	Sec. 29, T152N, R103W	0.11	American elm	11	Rocky Mountain juniper	7	common juniper	9
20	Sec. 29, T152N, R103W	0.12	green ash	25	chokecherry	10		
21	Sec. 29, T152N, R103W	0.18	green ash	26	silver buffaloberry	15	chokecherry	2
22	Sec. 29, T152N, R103W	0.09	green ash	16	silver buffaloberry	19		
23	Sec. 29, T152N, R103W	0.22	green ash	23				
24	Sec. 29, T152N, R103W	0.03	green ash	13				
25	Sec. 29, T152N, R103W	0.03	green ash	8				
26	Sec. 29, T152N, R103W	0.02	green ash	4				
27	Sec. 29, T152N, R103W	0.04	green ash	14				
28	Sec. 29, T152N, R103W	0.01	green ash	3				
29	Sec. 29, T152N, R103W	0.02	green ash	10				
30	Sec. 29, T152N, R103W	0.04	American elm	1	chokecherry	1	green ash	9
31	Sec. 29, T152N, R103W	0.04	green ash	12				
32	Sec. 29, T152N, R103W	0.01	green ash	2				
33	Sec. 29, T152N, R103W	0.10	green ash	3				
34	Sec. 29, T152N, R103W	0.02	green ash	2				
35	Sec. 29, T152N, R103W	0.03	green ash	3				
Total				418		225		140

Appendix C2 (continued). Tree and shrub polygon data.

Polygon	Species 4	Count 4	Species 5	Count 5	Species 6	Count 6	Species 7	Count 7
1	water birch	20						
2								
3	cottonwood	4						
4	common juniper	20	fragrant sumac	1				
5	quaking aspen	13	Rocky Mountain juniper	5	chokecherry	19		
6	American elm	6	fragrant sumac	8	common juniper	7	silver buffaloberry	3
7	water birch	1	green ash	3				
8	silver buffaloberry	4	green ash	3	chokecherry	3		
9	common juniper	6	Rocky Mountain juniper	2				
10	water birch	9	chokecherry	2				
11	red osier dogwood	2	Rocky Mountain juniper	4	chokecherry	5		
12	water birch	9	Rocky Mountain juniper	4	silver buffaloberry	8		
13	green ash	11	water birch	2	chokecherry	3		
14	common juniper	6	chokecherry	6	Russian olive	2		
15								
16	Rocky Mountain juniper	2	red osier dogwood	3	American elm	1		
17	common juniper	5	fragrant sumac	27				
18								
19	Russian olive	2	fragrant sumac	15				
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								
Total		120		85		48		3

Exhibit D

Agency Consultations



<Insert Date>, 2024

<Agency>

<Address>

<Address >

Re: Hiland Crude LLC
Gullickson Crude Transmission Project
Project Notification Letter and Review Request

To whom it may concern,

Hiland Crude LLC (Hiland), a wholly owned subsidiary of Kinder Morgan, Inc., proposes to construct and operate the Gullickson Crude Transmission Project (Project), which consists of an 8-inch steel crude oil transmission pipeline in McKenzie County to the northeast of Fairview, North Dakota. The proposed Gullickson route is approximately 3.69 miles. In addition, an approximate 1.57-mile alternative route is being evaluated along a portion of the Gullickson route. See the attached Project Location map. The purpose of the Project is to transport crude oil, as part of the larger Hiland Express Project. The line will connect existing 8" lines as part of Hiland Crude's Market Center System.

The Project has been designed to avoid sensitive social, cultural, and environmental resources as much as possible to minimize community and natural resource impacts. The pipeline route has been located on private land that is primarily in agricultural use and much of the pipeline right-of-way (ROW) has been located in or adjacent to other linear facility ROWs. Construction is proposed to start in Spring 2025 with an anticipated duration of three months.

The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Hiland plans to submit an application for a Certificate of Site Compatibility and Route Permit for the Project to the North Dakota Public Service Commission.

We are soliciting input from your agency or entity regarding any sensitive resources, current or planned development, or property interests your agency or entity may have in or around the Project that should be considered as it moves forward with development. In addition, we ask that you provide information regarding any applicable permits that may be required from your office. Hiland respectfully requests your response within 30 days of receipt of this letter. Copies of all correspondence received in response to this letter will be included with the North Dakota Public Service Commission applications. Hiland requests your consideration of the Project Study Area as shown on the attached Project Location map.

Hiland has contracted with Merjent, Inc. on this Project to provide environmental consulting support. If you have any questions regarding this request or require additional information to complete your review, please do not hesitate to contact me at 952-239-5920, or by email at John.Cannon@merjent.com at your convenience.

Sincerely,



John Cannon, Senior Project Manager
Merjent, Inc.

Enclosure: Project Location Map

cc: Hiland Project Files



September xx, 2024

North Dakota Parks and Recreation Department
Century Center
1600 E. Century Ave., Suite 3
PO Box 5594
Bismarck, ND 58506-5594

Re: Hiland Crude LLC
Gullickson Crude Transmission Project
Project Notification Letter and Review Request

To whom it may concern,

Hiland Crude LLC (Hiland), a wholly owned subsidiary of Kinder Morgan, Inc., proposes to construct and operate the Gullickson Crude Transmission Project (Project), which consists of an 8-inch steel crude oil transmission pipeline in McKenzie County to the northeast of Fairview, North Dakota. The proposed Gullickson route is approximately 3.69 miles. In addition, an approximate 1.57-mile alternative route is being evaluated along a portion of the Gullickson route. See the attached Project Location map. The purpose of the Project is to transport crude oil, as part of the larger Hiland Express Project. The line will connect existing 8" lines as part of Hiland Crude's Market Center System.

The Project has been designed to avoid sensitive social, cultural, and environmental resources as much as possible to minimize community and natural resource impacts. The pipeline route has been located on private land that is primarily in agricultural use and much of the pipeline right-of-way (ROW) has been located in or adjacent to other linear facility ROWs. Construction is proposed to start in Spring 2025 with an anticipated duration of three months.

The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Hiland plans to submit an application for a Certificate of Site Compatibility and Route Permit for the Project to the North Dakota Public Service Commission.

We are soliciting input from your agency or entity regarding any sensitive resources, current or planned development, or property interests your agency or entity may have in or around the Project that should be considered as it moves forward with development. In addition, we ask that you provide information regarding any applicable permits that may be required from your office. Hiland respectfully requests your response within 30 days of receipt of this letter. Copies of all correspondence received in response to this letter will be included with the North Dakota Public Service Commission applications. Hiland requests your consideration of the Project Study Area as shown on the attached Project Location map.

Hiland has contracted with Merjent, Inc. on this Project to provide environmental consulting support. If you have any questions regarding this request or require additional information to complete your review, please do not hesitate to contact me at 952-239-5920, or by email at John.Cannon@merjent.com at your convenience.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Cannon', with a long horizontal flourish extending to the right.

John Cannon, Senior Project Manager
Merjent, Inc.

Enclosure: Project Location Map

cc: Hiland Project Files

October 18, 2024

John Cannon
Mergent
1 Main Street+ Suite 300
Minneapolis, MN 55414

Re Hiland Crude LLC – Gullickson Crude Transmission Project

Dear John,

The North Dakota Parks and Recreation Department (NDPRD) has reviewed the above-referenced proposed construction and operation of the Gullickson Crude Transmission Project in McKenzie County, North Dakota.

NDPRD's scope of authority and expertise covers properties that NDPRD owns, leases, or manages; properties protected under Section 6(f) of the Land and Water Conservation Fund (LWCF); rare plants; and ecological communities established through the Natural Heritage Program.

The project does not appear to affect properties NDPRD owns, leases, or manages.

The project does not appear to affect any properties protected under Section 6(f) of the LWCF.

A North Dakota Natural Heritage biological conservation database query determines if any current or historical plant or animal species of concern or other significant ecological communities are known to occur within an approximate one-mile radius of the project area. Based on this review, no known plant and animal species of concern or significant ecological communities are documented within or immediately adjacent to the project site.

We appreciate your commitment to rare plant, animal, and ecological community conservation, management, and inter-agency cooperation. For additional information, please contact Kathy Duttenhefner at 701-328-5370, 701-220-3377 (cell), or kgdutzenhefner@nd.gov.

Thank you for the opportunity to comment on the proposed project.

Sincerely,



Kathy Duttenhefner, Chief Natural Resources Division



October 24, 2024

John Cannon
Merjent, Inc.
1 Main St SE, Ste 300
Minneapolis, MN 55414
John.cannon@merjent.com

SHSND Ref.: 24-9118 Gullickson Crude Transmission Project in portions of [T151N R103N Section 4, and T152N R103N Sections 29, 32, & 33] in McKenzie County, North Dakota

Dear John,

We reviewed your request for SHSND Ref.: 24-9118 Gullickson Crude Transmission Project in McKenzie County, North Dakota. Portions of the project area have previously been surveyed with numerous archaeological sites found. We recommend a Class III (pedestrian survey) of cultural resources in the areas of project area that have not previously been surveyed. The survey must follow "North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects," which is available at <https://www.history.nd.gov/hp/hpforms.html>.

Thank you for the opportunity to review this project to date. We look forward to review of the Class III survey for archaeological resources. If you have any questions please contact Lorna Meidinger, Lead Historic Preservation Specialist at (701) 328-2089 or lbmeidinger@nd.gov.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

24-9118

From: [Vigesaa, Claire](#)
To: [John Cannon](#)
Subject: EXTERNAL: Gullickson Crude Transmission Project
Date: Monday, September 30, 2024 2:03:01 PM

CAUTION: This email originated from outside of Merjent.

Mr. Cannon,

I received your letter re: the Gullickson Crude Transmission Project. The ND Transmission Authority has no permit requirements related to your project.

Sincerely,

Claire

Claire Vigesaa, Executive Director
North Dakota Transmission Authority
406-489-3881

October 21, 2024

Mr. John Cannon
Merjent Engineering
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414
John.Cannon@merjent.com
952-239-5920

Dear Mr. Cannon

This is in response to your request for a review of the environmental impacts associated with the Gullickson Crude Transmission Project, located in McKenzie County, North Dakota.

The proposed project has been reviewed by Department of Water Resources (DWR), and the following comments are provided:

-Initial review indicates the project does not require a conditional or temporary permit for water appropriation. However, if surface water or groundwater will be diverted for construction of any future projects identified in the plan, a water permit will be required per North Dakota Century Code § 61-04-02. Please consult with the DWR Water Appropriation Division if you have any questions at (701) 328-2754 or appropinfo@nd.gov.

-There are no FEMA National Flood Insurance Program (NFIP) floodplains identified or mapped where the proposed project is to take place. No permit relative to the NFIP are likely required based on the current effective Flood Insurance Rate Map and State minimum standards. However, flood risk has been identified through the North Dakota Risk Assessment Mapservice and Base Level Engineering (BLE) (ndram.dwr.nd.gov). In the absence of FEMA NFIP data, BLE is often considered best available data and is recommended to be considered in the design process. The State of North Dakota has no formal NFIP permitting authority as all NFIP permitting decisions are considered by impacted NFIP participating communities, the community with zoning authority for the area in question. Please work directly with the local floodplain administrators of the zoning authorities impacted.

-The DWR Regulatory Division's Engineering and Permitting Section reviewed the project location and determined no drainage permits, or construction permits for dikes, diversions, or restorations are likely required so long as no watercourses are modified (i.e., deepened, widened, rerouted, etc.) and no ponds, sloughs, lakes, or any series thereof, with a drainage area of 80 acres or more are drained. Furthermore, any spoil piles resulting from trenching that are not remediated could be considered dikes, which may require a construction permit(s). For more information on these requirements, please visit the Regulation & Appropriation tab on the DWR website (dwr.nd.gov) or contact the Regulatory Division directly at 701-328-2750 or dwrregpermits@nd.gov.

Thank you for the opportunity to provide review comments. Should you have further questions, please contact me at 701-328-4970 or kyrkoski@nd.gov.

Sincerely,



Kyle Yrkoski
Planner III

KY:mg/1570



RECEIVED

SEP 30 2024

ND DEPT. OF WATER RESOURCES

September 24, 2024

Department of Water Resources
900 East Boulevard Ave
Bismarck, ND 58505

Re: Hiland Crude LLC
Gullickson Crude Transmission Project
Project Notification Letter and Review Request

To whom it may concern,

Hiland Crude LLC (Hiland), a wholly owned subsidiary of Kinder Morgan, Inc., proposes to construct and operate the Gullickson Crude Transmission Project (Project), which consists of an 8-inch steel crude oil transmission pipeline in McKenzie County to the northeast of Fairview, North Dakota. The proposed Gullickson route is approximately 3.69 miles. In addition, an approximate 1.57-mile alternative route is being evaluated along a portion of the Gullickson route. See the attached Project Location map. The purpose of the Project is to transport crude oil, as part of the larger Hiland Express Project. The line will connect existing 8" lines as part of Hiland Crude's Market Center System.

The Project has been designed to avoid sensitive social, cultural, and environmental resources as much as possible to minimize community and natural resource impacts. The pipeline route has been located on private land that is primarily in agricultural use and much of the pipeline right-of-way (ROW) has been located in or adjacent to other linear facility ROWs. Construction is proposed to start in Spring 2025 with an anticipated duration of three months.

The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Hiland plans to submit an application for a Certificate of Site Compatibility and Route Permit for the Project to the North Dakota Public Service Commission.

We are soliciting input from your agency or entity regarding any sensitive resources, current or planned development, or property interests your agency or entity may have in or around the Project that should be considered as it moves forward with development. In addition, we ask that you provide information regarding any applicable permits that may be required from your office. Hiland respectfully requests your response within 30 days of receipt of this letter. Copies of all correspondence received in response to this letter will be included with the North Dakota Public Service Commission applications. Hiland requests your consideration of the Project Study Area as shown on the attached Project Location map.

Hiland has contracted with Merjent, Inc. on this Project to provide environmental consulting support. If you have any questions regarding this request or require additional information to complete your review, please do not hesitate to contact me at 952-239-5920, or by email at John.Cannon@merjent.com at your convenience.

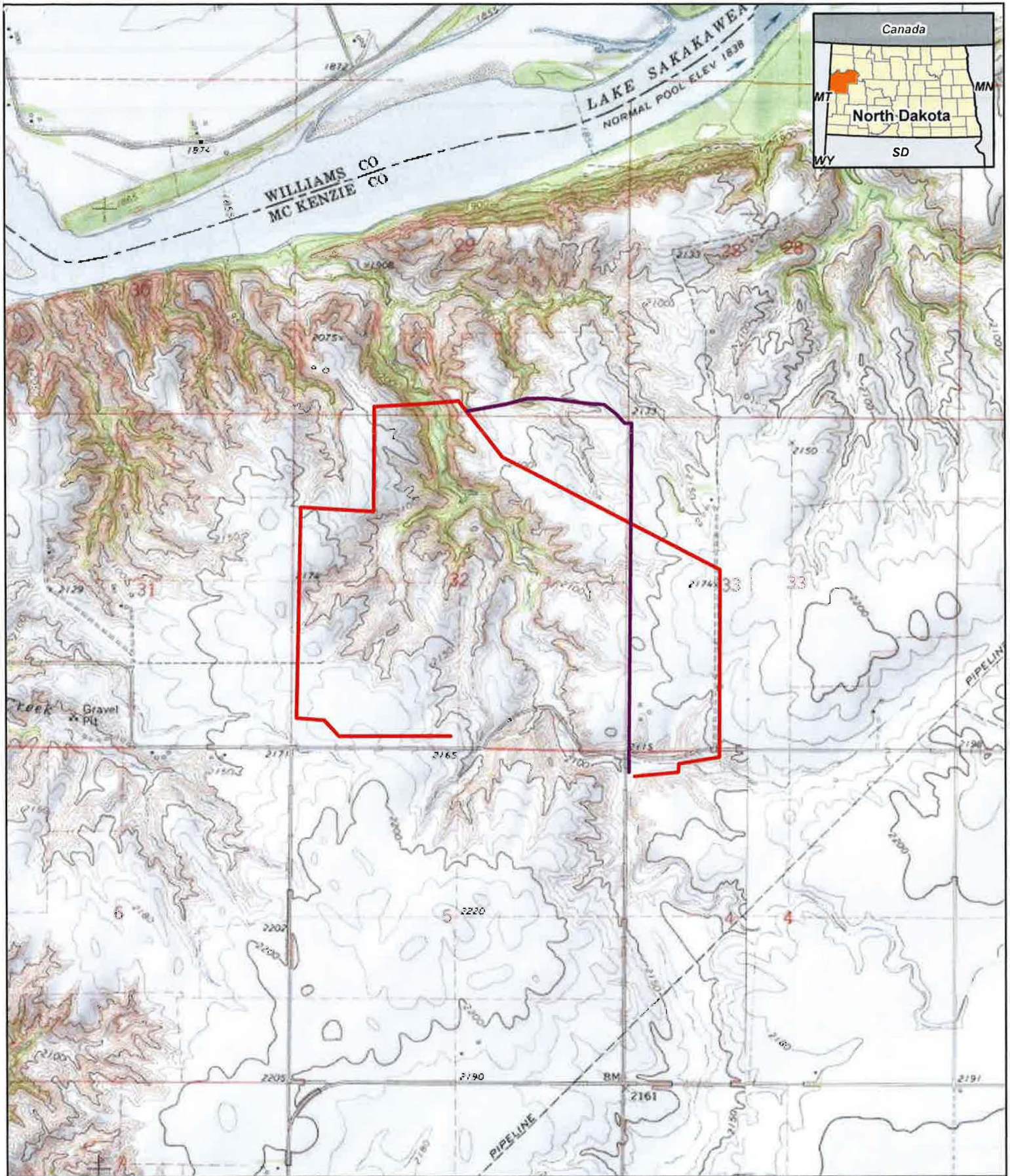
Sincerely,



John Cannon, Senior Project Manager
Merjent, Inc.

Enclosure: Project Location Map

cc: Hiland Project Files



merjent.

0 2,000 Feet

1:24,000



**Hiland Express 8-inch
Gullikson Crude Reroute Project
Project Location
McKenzie County, North Dakota**

- Gullikson Reroute
- Potential Lassey Reroute

October 24, 2024

John Cannon
Senior Project Manager
Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, MN 55414

Re: Hiland Crude LLC, Gullickson Crude Transmission Project in McKenzie County

Dear Mr. Cannon:

The North Dakota Department of Environmental Quality (Department) has reviewed the information concerning the above-referenced project received at the Department on September 30, 2024, with respect to possible environmental impacts.

1. Necessary measures should be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise should be dealt with in an efficient and effective manner.
2. Care is to be taken during construction activity near any water of the state to minimize adverse effects on a water body. This includes minimal disturbance of stream beds and banks to prevent excess siltation, and the replacement and revegetation of any disturbed area as soon as possible after work has been completed. Caution must also be taken to prevent spills of oil and grease that may reach the receiving water from equipment maintenance and/or the handling of fuels on the site. Guidelines for minimizing degradation to waterways during construction are attached.
3. Oil and gas projects disturbing one or more acres are required to obtain a permit to discharge stormwater if runoff from the project will carry eroded material to a water of the state. A permit is not required for oil and gas projects if runoff from the project will not carry eroded material to a water of the state. Projects involving temporary dewatering or hydrostatic testing also are required to have a permit to discharge. Further information on the stormwater permit and temporary dewatering and hydrostatic testing permit may be obtained from the Department's website or by calling the Division of Water Quality at 701-328-5210. In addition, cities or counties may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local stormwater management considerations are addressed.

4. The construction project is within one mile of the Trenton aquifer and is within a sensitive groundwater area. Care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality. All spills must be immediately reported to this Department and appropriate remedial actions performed.
5. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste management and recycling is available from the Department's Division of Waste Management at 701-328-5166.
6. Projects that involve construction of pipelines should select locations that minimize the potential for impacts to human health and the environment during and after construction by avoiding, when possible, source water protection areas and sensitive surface and groundwater environments. Additionally, when possible, pipeline routes should select areas with natural barriers to both surface and ground waters. Human health and the environment should be further protected by developing a spill response plan that emphasizes rapid deployment of prepositioned assets necessary to contain spills and subsequent cleanup. Proper surveillance and monitoring for early detection of leaks should be required.

These comments are based on the information provided about the project in the above-referenced submittal. The U.S. Army Corps of Engineers may require a water quality certification from this Department for the project if the project is subject to their Section 404 permitting process. Any additional information which may be required by the U.S. Army Corps of Engineers under the process will be considered by this Department in our determination regarding the issuance of such a certification.

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

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

Sincerely,



L. David Glatt, P.E., Director
North Dakota Department of Environmental Quality

LDG:ll
Attach.

Construction and Environmental Disturbance Requirements

The following are the minimum requirements of the North Dakota Department of Environmental Quality (Department) for projects that involve construction and environmental disturbance in or near waters of the State of North Dakota. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect waters of the state. All projects must be constructed to minimize the loss of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion and sediment loss using erosion and sediment controls. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, and land resources must be prohibited against compaction, vegetation loss and unnecessary damage.

Surface Waters

All construction must be managed to minimize impacts to aquatic systems. Follow safe storage and handling procedures to prevent the contamination of water from fuel spills, lubricants, and chemicals. Stream bank and stream bed disturbances must be contained to minimize silt movement, nutrient upsurges, plant dislocations, and any physical chemicals, or biological disruption. The use of pesticides or herbicides in or near surface waters is allowed under the Department's pesticide application permit with notification to the Department.

Fill Material

Any fill material placed below the ordinary high-water mark must be free of topsoil, decomposable materials, and persistent synthetic organic compounds, including, but not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill material. All temporary fills must be removed. Debris and solid waste must be properly disposed or recycled. Impacted areas must be restored to near original condition.



November 18, 2024

John Cannon
Senior Project Manager
Merjent, Inc.
1 Main Street SE – Suite 300
Minneapolis, MN 55414

Dear Mr. Cannon:

RE: Gullickson Crude Transmission Project
McKenzie County, North Dakota

Hiland Crude LLC is proposing to construct and operate approximately 3.69-miles of 8-inch steel crude oil transmission pipeline in McKenzie County, North Dakota. In addition, an approximate 1.57-mile alternative route is being evaluated along a portion of the proposed route. The North Dakota Game and Fish Department has reviewed this project for wildlife concerns.

A primary concern with pipeline projects is the possible disturbance of native prairie and wooded draws associated with construction of the pipeline and access roads. Avoidance of native prairie areas reduces impacts to several grassland species including many species of conservation priority. We ask that work within these areas be avoided to the extent possible, every effort be made to prevent destruction of woody vegetation, and disturbed areas be reclaimed to pre-project conditions.

The National Wetland Inventory indicates a variety of wetlands within the proposed project corridor, primarily associated with drainageways. Steps should be taken to protect any wetlands that cannot be avoided, no alterations should be made to existing drainage patterns, and above-ground appurtenances should not be placed in wetland areas. Unavoidable destruction or degradation of wetland acres should be mitigated in kind.

We recommend that surveys be conducted for raptor nests before construction begins, and a ½-mile construction buffer be implemented around active eagle nest sites (known occupied within the past five years). Ms. Sandra Johnson, Conservation Biologist, may be contacted at 701-328-6382 for additional information on eagle nest sites in the state.

We do not believe this project will have significant adverse effects on wildlife or wildlife habitat provided these recommendations are implemented where appropriate during project construction.

Sincerely,


Greg Link
Chief
Conservation & Communications Division

Governor
Doug Burgum

Director
Jeb Williams

Deputy Director
Scott A. Peterson

CAUTION: This email originated from outside of Merjent.

From: Anderson, Fred J.
To: John Cannon
Subject: EXTERNAL: NDGS: Review of the Hiland Crude Gullikson Transmission Project Comments
Date: Wednesday, October 2, 2024 4:24:04 PM
Attachments: image001.png

Mr. Cannon-

Thank you for the opportunity to review and provide comment on your proposed energy infrastructure project.

We reviewed the route of the proposed crude oil transmission pipeline against our landslide maps and recent aerial imagery and did not note any areas of concern with the proposed route at this time.

Our recently completed landslide maps and data for this project area can be found here: https://www.dmr.nd.gov/ndgs/landslides/WatfordCity/24k/Butford_24k_L.pdf

Please contact us if you have any questions or comments regarding this review.

Regards,

Fred J. Anderson
Geologist

North Dakota Geological Survey

701.328.8000 (O) . fjanderson@nd.gov . www.dmr.nd.gov

Text □ Description automatically generated



October 4, 2024

Natural Resources
Conservation Service

Bismarck State Office
PO Box 1458
Bismarck, ND
58502-1458

Voice 701.530.2000
Fax 855-813-7556

John Cannon, Senior Project Manager
Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, MN 55414

Dear Mr. Cannon:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated September 24, 2024, concerning the Gullickson Crude Transmission Project in McKenzie County, North Dakota.

NRCS has a major responsibility with the Farmland Protection Policy Act (FPPA) in documenting conversion of farmland (i.e., Prime, Statewide Importance and/or Local Importance) to non-agricultural use when federal funds are utilized. Your project appears to only include the installation of presumed below ground pipeline which does not remove farmland from production, therefore, FPPA does not apply, and no further action is needed.

If you have additional questions pertaining to FPPA, please contact Wade Bott, State Soil Scientist, NRCS, Bismarck, North Dakota, at (701) 530-2021.

Sincerely,

WADE BOTT

Digitally signed by WADE BOTT
Date: 2024.10.04 08:40:19 -05'00'

WADE D. BOTT
State Soil Scientist



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
3319 UNIVERSITY DRIVE
BISMARCK, NORTH DAKOTA 58504

October 10, 2024

NWO-2024-1659-BIS

Merjent, Inc.
Attn: John Cannon
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

Dear Mr. Cannon:

This is in response to information we recently received, by letter dated September 24, 2024, regarding the proposed Hiland Crude - Gullickson Crude Transmission Project. This proposed pipeline project is located portion of Section 4, Township 151 North, Range 103 West, and portion of Sections 32, 29 and 33, Township 152 North, Range 103 West, McKenzie County, North Dakota.

U. S. Army Corps of Engineers Regulatory Offices administer Section 404 of the Clean Water Act (Section 404). A Section 404 permit would be required for the discharge of dredge or fill materials (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

Based on the information contained in your letter, the Corps has determined that your proposed project may need a Clean Water Act Section 404 permit. The permit application and instructions for completing the application are enclosed and may also be found at: <http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit>. Be sure to accurately describe all proposed work and construction methodology. Once the application is complete, mail it to the letterhead address or to the email address below.

Please refer to identification number NWO-2024-1659-BIS in any correspondence concerning this project. If you have any questions, please contact Jason Renschler at U.S. Army Corps of Engineers, North Dakota Regulatory Office, 3319 University Drive, Bismarck, North Dakota 58504, by email at jason.j.renschler@usace.army.mil, or telephone at 701-989-6429. For more information regarding our program, please visit our website at <http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/NorthDakota.aspx>

Sincerely,

Jason Renschler
Senior Project Manager
North Dakota

Enclosure
- application.



October 25, 2024

United States Fish and Wildlife Service
North Dakota Field Office
3425 Miriam Avenue
Bismarck, ND 58501-7926

Re: Hiland Crude LLC
Gullickson Crude Transmission Project
Project Notification Letter and Review Request

To whom it may concern,

Hiland Crude LLC (Hiland), a wholly owned subsidiary of Kinder Morgan, Inc., proposes to construct and operate the Gullickson Crude Transmission Project (Project), which consists of an 8-inch steel crude oil transmission pipeline in McKenzie County to the northeast of Fairview, North Dakota. The proposed Gullickson route is approximately 3.69 miles. In addition, an approximate 1.57-mile alternative route is being evaluated along a portion of the Gullickson route. See the attached Project Location map. The purpose of the Project is to transport crude oil, as part of the larger Hiland Express Project. The line will connect existing 8" lines as part of Hiland Crude's Market Center System.

The Project has been designed to avoid sensitive social, cultural, and environmental resources as much as possible to minimize community and natural resource impacts. The pipeline route has been located on private land that is primarily in agricultural use and much of the pipeline right-of-way (ROW) has been located in or adjacent to other linear facility ROWs. Construction is proposed to start in Spring 2025 with an anticipated duration of three months.

The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Hiland plans to submit an application for a Certificate of Site Compatibility and Route Permit for the Project to the North Dakota Public Service Commission.

We are soliciting input from your agency or entity regarding any sensitive resources, current or planned development, or property interests your agency or entity may have in or around the Project that should be considered as it moves forward with development. In addition, we ask that you provide information regarding any applicable permits that may be required from your office. Hiland respectfully requests your response within 30 days of receipt of this letter. Copies of all correspondence received in response to this letter will be included with the North Dakota Public Service Commission applications. Hiland requests your consideration of the Project Study Area as shown on the attached Project Location map.

Endangered Species Act

On October 10, 2024, Merjent, Inc. queried the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) system. Results of the IPaC query indicated that the following species may occur within the Project Study Area.

Federally Listed, Proposed, and Candidate Species Based on the Proposed Project Study Area ¹		
Scientific Name	Species Name	Status
<i>Myotis septentrionalis</i>	Northern Long-eared Bat	Endangered
<i>Charadrius melodus</i>	Piping Plover	Threatened
<i>Calidris canutus rufa</i>	Rufa Red Knot	Threatened
<i>Grus americana</i>	Whooping Crane	Endangered
<i>Hesperia dacotae</i>	Dakota Skipper	Threatened
<i>Speyeria idalia</i>	Western Regal Fritillary	Proposed Threatened
<i>Danaus plexippus</i>	Monarch Butterfly	Candidate

¹ Information for Planning and Consultation (IPaC). Available at <https://ecos.fws.gov/ipac/>.

Hiland conducted surveys in September and October 2024 for habitat of Northern Long-eared Bat, Piping Plover, and Dakota Skipper with the objective of avoiding and minimizing impacts. Hiland does not anticipate that this Project will have a federal nexus and plans to coordinate with the USFWS as needed based on results from Project-specific IPAC Determination Keys.

USFWS-Managed Lands

Waterfowl production areas and wetland and grassland easements represent an important tool used by the USFWS to identify and manage high-quality wildlife habitat. A review of public records did not identify these USFWS-managed lands in the Project Study Area. Hiland requests that USFWS notify Hiland of any USFWS-managed lands located within the Project Study Area.

Migratory Bird Treaty Act

Hiland understands that, unlike the Endangered Species Act, the Migratory Bird Treaty Act has no provision for the allowance of incidental take. Therefore, compliance may best be achieved by avoiding or minimizing the potential to interact with migratory species.

Bald and Golden Eagle Protection Act (BGEPA)

Bald Eagles (*Haliaeetus leucocephalus*) and Golden Eagles (*Aquila chrysaetos*) are protected under the Bald and Golden Eagle Protection Act (BGEPA). BGEPA protects Bald Eagles and Golden Eagles throughout their range in the United States. Hiland conducted line-of-sight surveys for Bald Eagle and Golden Eagle nests in September and October 2024, and none were observed. Thus, Hiland does not anticipate impacts on Bald Eagles and Golden Eagles under BGEPA due to Project construction.

Hiland has contracted with Merjent, Inc. on this Project to provide environmental consulting support. If you have any questions regarding this request or require additional information to complete your review, please do not hesitate to contact me at 952-239-5920, or by email at John.Cannon@merjent.com at your convenience.

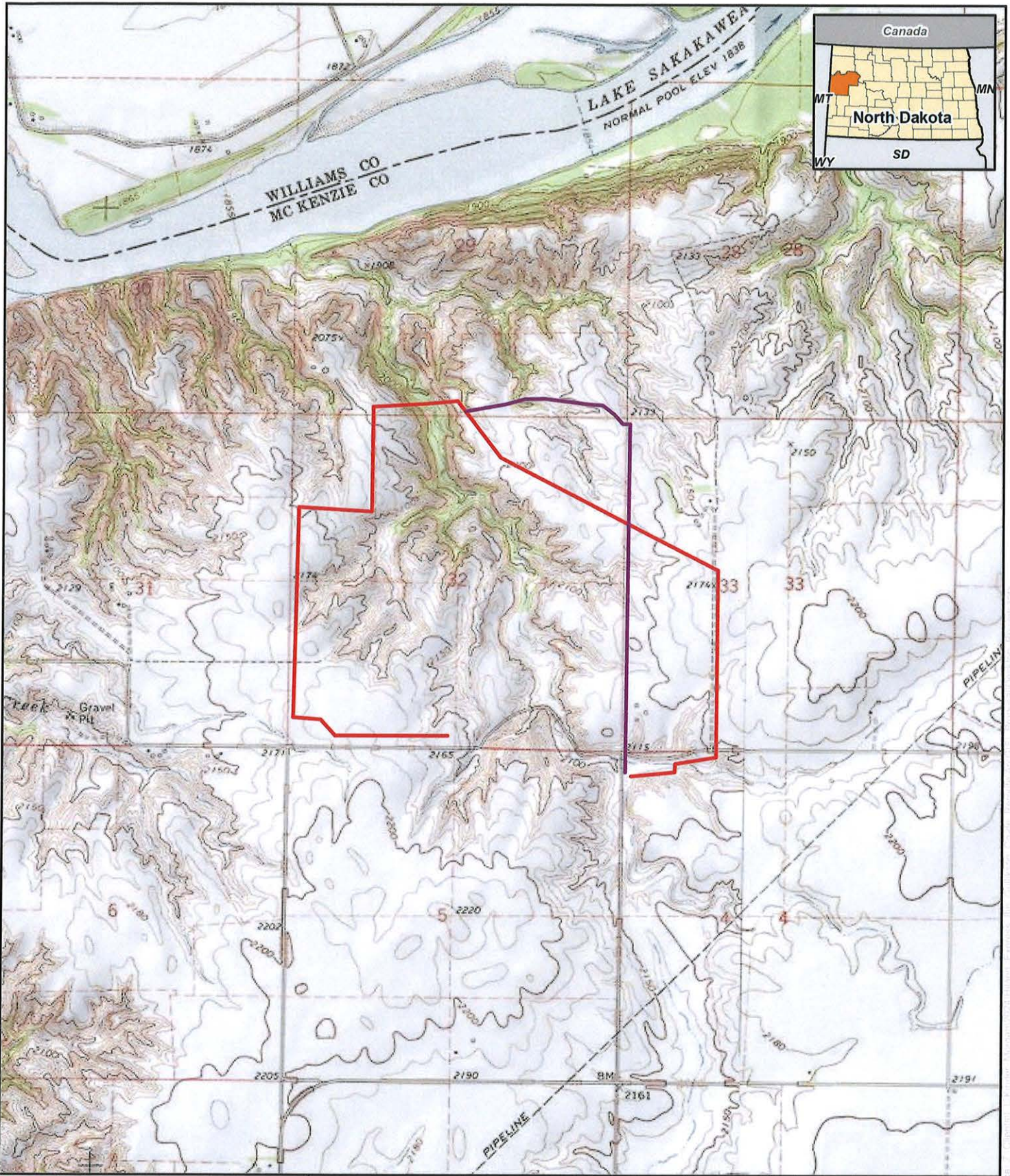
Sincerely,



John Cannon, Senior Project Manager
Merjent, Inc.

Enclosure: Project Location Map

cc: Hiland Project Files



merjent.

0 2,000 Feet

1:24,000

For Environmental Review Purposes Only

**Hiland Express 8-inch
Gullikson Crude Reroute Project
Project Location
McKenzie County, North Dakota**

- Gullikson Reroute
- Potential Lassey Reroute

Date: 10/21/2024 Source: Columbia Petroleum Authority, Esri

Exhibit E

Landowner Waivers

Per North Dakota Century Code § 49-22.1-03 and North Dakota Administrative Code § 69-06-08-02, Hiland reviewed the proposed pipeline route for inhabited residences within 500 feet. Hiland determined that there are no inhabited residences within 500 feet of the proposed pipeline. Accordingly, Hiland's Project will not require setback waivers.

Exhibit F

Project Construction Plans



Hiland Crude, LLC
a Kinder Morgan company

Hiland Crude, LLC
a subsidiary of Kinder Morgan

Gullickson Reroute
Pipeline Project
McKenzie County, North Dakota

Construction Standards
Environmental Requirements
C1260

February 2025

Table of Contents

1. Scope 2
2. Permit Compliance..... 2
3. General Best Management Practices (BMP's) 2
4. Access Roads 4
5. Upland Construction Activities 4
6. Trenching 5
7. Water Body Crossings 6
8. Wetland Crossings 7
9. Hydrostatic Testing 10
10. Cleanup Procedures 10
11. Revegetation 11
12. Spill Prevention, Control and Countermeasures..... 13
13. Waste Management 13

1. Scope

This document defines the Company standards for Environmental Requirements during construction of all Pipelines, Meter Stations, Compressor Stations and Gas Processing and Treating Facilities. For Projects subject to FERC regulation, additional requirements may apply, and shall supercede the basic requirements contained herein.

2. Permit Compliance

Contractor shall perform all construction work in compliance with applicable permits, authorizations, and clearances. Applicable Federal, State, County, or municipal permits shall supercede the requirements contained in this standard.

The Company shall prepare documentation and submit reports as required for compliance with environmental permits and/or agency requirements.

The Project Manager may designate in the Scope of Work that the Contractor is responsible for obtaining environmental permits or authorizations. Contractor shall provide copies of all permit applications or authorization requests, prior to submitting to agencies, for review by the Environmental, Health and Safety Department (EHS).

3. General Best Management Practices (BMP's)

- 3.1. All construction activities shall be conducted to minimize adverse environmental impacts. Contractor shall conduct all construction activities in an environmentally-sensitive manner in conformance with this standard and in compliance with applicable Federal, State, or local environmental regulations.

The Contractor shall employ construction methods and preventive measures (in all construction and support areas) to control dust generation, soil erosion, siltation of water bodies and wetlands, and spills of fuels, solvents, or other materials. Contractor shall install, inspect, and maintain said preventative measures required for any construction-related activities. Contractor shall comply with all requirements of this standard, which is the **minimum** performance requirement.

- 3.2. Contractor shall install control structures at locations along the right-of-way (ROW). Contractor shall select the BMP's that provide compliance with applicable environmental requirements. Typical BMP's include:

- Hay bale berms. Refer to Company Construction Drawings [CST-P-1260-A190.1 – Typical Straw Bale Sediment Barrier Erosion Control](#) and [CST-P-1260-A190.2 – Typical Straw Bale Sediment Barrier Erosion Control](#)
- Silt fences. Refer to Company Construction Drawings [CST-P-1260-A180.1 – Typical Silt Fence Sediment Barrier Erosion Control](#) and [CST-P-1260-A180.2 – Typical Silt Fene Sediment Barrier Erosion Control](#)
- Temporary slope breakers. Refer to Company Construction Drawings [CST-P-1260-A220.1 – Typical Slope Breaker](#) and [CST-P-1260-A220.2 – Typical Slope Breaker](#).
- Sediment logs/waddles. Refer to Company Drawing (to be developed as needed in future)

- 3.3. Contractor shall install, inspect, and maintain BMP's in conformance with Manufacturer specifications and in compliance with permits, the Scope of Work, and Construction Drawings. Contractor shall install BMP's immediately after initial soil disturbance, and shall maintain BMP's until restoration is completed or such time as the Company authorizes BMP removal. When identified as necessary (e.g., by an inspection) and until BMP's are replaced or restoration is completed, Contractor shall reinstall or modify BMP's as soon as practicable or as required by conditions of permits.

- 3.4. Unless determined otherwise by the Company Representative, the following spacing requirements shall apply to temporary and permanent slope and trench breakers as minimum requirements for the ROW:

Slope (%)	Spacing (ft)
5 to 15	300
>15 to 30	200
>30	100

Table C1260 / 3.4 – Right-of-Way Slope %

- 3.5. Permanent Slope Breakers

Refer to Company Construction Drawings [CST-P-1260-A220.1 – Typical Slope Breaker](#) and [CST-P-1260-A220.2 – Typical Slope Breaker](#).

Unless otherwise directed by the Company Representative, or where an area is residential or normally cultivated, Contractor shall install permanent slope breakers at the same minimum spacing as temporary slope breakers.

- 3.6. Contractor shall install terraces at the base of all slopes adjacent to water bodies, near boundaries between Company-designated wetlands, and adjacent to disturbed upland areas. Contractor shall also install terraces at locations specified by the Company Representative.

- 3.7. Temporary Trench Plugs

Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent. Topsoil shall not be used for trench plugs. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes. The Company Representative shall determine requirements for, and spacing of, trench plugs. If not specified, Contractor shall leave hard trench plugs (undisturbed soil) on either side of water body crossings and drain tiles, as shown in Company [Construction Drawing CST-P-1150-A275 – Typical Flowing Waterbody Crossing Open Cut Trenched](#).

The Company Representative shall determine requirements for, and spacing of, trench plugs. If not specified, Contractor shall leave hard trench plugs (undisturbed soil) on either side of water body crossings and drain tiles as shown in Company [Construction Drawing CST-P-1150-A275 – Typical Flowing Waterbody Crossing Open Cut Trenched](#).

- 3.8. Trench Breakers

Refer to Company [Construction Drawing CST-P-1260-A200 – Typical Trench Breaker](#).

The Company Representative shall determine requirements for, and spacing of, trench breakers.

- 3.8.1. Trench breakers shall be installed at the same spacing as, and upslope of, terraces and/or permanent slope breakers.
- 3.8.2. In agricultural fields and residential areas where slope breakers are not typically required, trench breakers shall be installed at the same spacing as if permanent slope breakers were required.
- 3.8.3. Trench breakers shall be installed at the base of slopes greater than 5% where the base of the slope is less than 50 feet from a water body or wetland.
- 3.8.4. Trench breakers shall be installed where needed to avoid draining a water body or wetland (to prevent sediment flow into wetlands).
- 3.8.5. Trench breakers shall not be constructed of topsoil.

CONSTRUCTION STANDARDS

- 3.9. Revegetation (Temporary)
Disturbed areas shall be re-seeded in conformance with Scope of Work, Construction drawings, ROW line list, or permit requirements.
- 3.10. Revegetation (Permanent)
Disturbed areas shall be re-seeded in conformance with Scope of Work, Construction drawings, ROW line list or permit requirements.
- 3.11. Mulch
Refer to Company [Construction Drawing CST-P-1260-A215 – Typical Straw Mulch Erosion Control](#).
Mulch shall be applied on all slopes (except in actively-cultivated cropland) prior to, concurrent with, or immediately after seeding where necessary to stabilize the soil surface and to reduce wind and water erosion. Asphalt or asphalt-and-resin emulsions shall be applied in conformance with Manufacturer's recommendations. Mulch shall be applied in conformance with Scope of Work, Construction drawings, ROW line list, or permit requirements.
- 3.12. Jute Thatching or Bonded Fiber Blankets
Jute thatching or bonded fiber blankets may be installed on water body banks (to stabilize seeded areas and other critical areas where the use of mulch and anchoring tools is impractical). Fabric shall be anchored with pegs or staples per Manufacturer's specifications.
- 3.13. Sediment Basins
Sediment basins shall be constructed in conformance with Scope of Work, Construction drawings, ROW line list, or permit conditions.
- 3.14. Contractor shall prevent litter, construction debris and construction chemicals that could be exposed to storm water from becoming a pollutant source in storm water discharges.

4. Access Roads

- 4.1. Unless otherwise specified, access to the ROW shall be from existing, commonly used public roads. The Company Representative shall review and approve any Contractor arrangements to use private roads or undeveloped public roadways as ROW access roads.
- 4.2. Contractor shall maintain safe and accessible conditions at all road crossings and access points during construction. Contractor shall remove (by periodic sweeping and scraping) all sediment tracked onto public roads as a requirement of work.
- 4.3. ROW access points at public road crossings shall be subject to local permit conditions and restrictions. If required by the Company Representative or local permit, Contractor shall install crushed stone access pads on either side of the public road at ROW crossings and/or other access road entrances. In residential or active agricultural areas, such stone access pads shall be placed on synthetic fabric (to facilitate stone removal). Refer to Company [Construction Drawing CST-P-1000-A145 – Typical Temporary Paved Road Access Pad](#).
- 4.4. Temporary access roads and final disposition shall be identified in the Scope of Work, Construction drawings, or ROW line list.

5. Upland Construction Activities

- 5.1. The nominal construction ROW width shall be limited by ROW agreements with landowners, regulatory certificates, and permit or agency requirements. No access or

activities are permitted outside ROW limits, Company-approved access roads, or pre-approved staging and work areas.

- 5.2. The Company Representative shall approve use of any additional areas that are not identified in the Scope of Work, Construction drawings, ROW line list, or permit conditions.

- 5.3. Topsoil Segregation

Refer to Company Construction Drawings [CST-P-1260-A250 – Typical Full Topsoil Separation Side Hill Construction](#), [CST-P-1260-A255 – Typical Topsoil Separation Trench & Spoilside Method](#), [CST-P-1260-A260](#), [CST-P-1260-A265 – Typical Topsoil Separation Trench Plus 4' Method](#), and [CST-P-1260-A270 – Typical Full Topsoil Separation Side Hill Construction Spoilside Travel Lane](#).

Topsoil shall be segregated for linear facilities construction or for temporary use areas in actively-cultivated or rotated croplands and pastures, residential areas, hayfields, and other areas when requested by landowners or jurisdictional agencies. Soil segregation shall be in conformance with Scope of Work, agency requirements, ROW line list, or conditions of permits. Salvaged topsoil and subsoil shall be maintained separately throughout all construction activities. Segregated topsoil shall not be used for padding the pipe.

6. Trenching

- 6.1. Tile lines encountered during trenching operations shall be protected and repaired after trenching. Refer to Company [Construction Drawing CST-P-1000-A305 – Typical Undercrossing of Tile Drainlines](#).
- 6.2. Contractor shall cover open ends of cut tile to prevent the entrance of dirt or animals. Contractor shall immediately mark damaged tile locations using lath with colored ribbon flagging, or with alternate methods approved by the Company Representative. Lath markers shall not be removed except when tile repair crews reopen and repair tiles. Where necessary (to maintain drainage during construction), a temporary pipe bridge or temporary soft trench plugs shall be installed on both sides of the tile.
- 6.3. Qualified personnel shall test and repair drain tiles. After trenching, Contractor shall probe all drainage tile systems within the disturbed area to check for damage to the tile system. If damage is noted, locations of damage shall be marked as in previous paragraph 6.2 (above).
- 6.4. Contractor shall perform permanent drain tile repair or replacement (to original or better condition) as required by the Company Representative, landowner, and all applicable jurisdictional agencies.
- 6.5. Contractor shall make every effort to limit the amount of construction equipment traveling over repaired areas, especially in wet conditions.
- 6.6. For new pipelines in areas where drain tiles exist (or are planned), Contractor shall ensure that the depth of cover (over the pipeline) avoids interference with drain tile systems. For adjacent pipeline loops in agricultural areas, Contractor shall install new pipeline with at least the same depth of cover as the existing pipeline(s).
- 6.7. Contractor shall install trench plugs at all water body crossings and drainage tiles, unless directed otherwise by the Company Representative.
- 6.8. Trench dewater shall be filtered to prevent silt-laden water being discharged into any wetland or water body or in conformance with permit requirements. The filtration system shall be installed on the approved/authorized ROW or within areas approved by the Company Representative. Refer to Company [Construction Drawing CST-P-1000-A165 – Typical Geotextile Filter Bag for Dewatering](#).

7. Water Body Crossings

- 7.1. Contractor shall install water body crossings in conformance with the Scope of Work, Construction drawings, or permit conditions. Any changes in work areas require pre-approval by the Company Representative.
- 7.2. Until equipment bridges are installed, Contractor shall limit the number of water body crossings by heavy equipment to one stream or wetland crossing per piece of equipment. For construction across wetlands or other water bodies, Contractor shall comply with permit conditions.
- 7.3. Contractor shall limit the use of equipment within streams. Only equipment required to complete water crossings or as specified by permit conditions shall be allowed in-stream.
- 7.4. General work area requirements:
 - 7.4.1. Contractor shall use equipment bridges to cross waterbodies. Refer to Company Construction Drawings [CST-P-1000-A335 – Typical Water Body Bridge Rockfill & Flume](#), [CST-P-1000-A340 – Typical Portable Water Body Bridge](#), [CST-P-1000-A345](#), [CST-P-1000-A350 – Typical Portable Water Body Bridge with Culvert Support](#), and [CST-P-1000-A355 – Typical Flexi-Float Water Body Bridge](#).
 - 7.4.2. Contractor shall only use extra work areas (such as staging areas and additional spoil storage areas) identified in the Scope of Work or Construction drawings as permit conditions allow.
 - 7.4.3. Contractor shall limit vegetation clearing between extra work areas and edges of water bodies to the Company-authorized construction ROW.
 - 7.4.4. Contractor shall limit the size of extra work areas to no more than is necessary for construction of water body crossings.
 - 7.4.5. Company Representative shall approve extra work areas prior to use.
 - 7.4.6. For wetland or stream crossings, Contractor shall have on site at least one spill kit with equipment and supplies capable of containing releases of fuel, oil, or other substances. At a minimum, the spill kit shall contain plastic sheeting, sorbent material, and spill booms.
- 7.5. General crossing procedures and requirements:
 - 7.5.1. Contractor shall comply with Section 404, Nationwide Permit Program Terms and Conditions (33 CFR Part 330) or as directed by the Company Representative.
 - 7.5.2. Contractor shall maintain flow rates to protect aquatic life and prevent interruption of existing downstream water use.
 - 7.5.3. Concrete coating activities, and/or the storage of hazardous materials, chemicals, fuels, or lubricating oils, is not allowed within 100 feet of any water body or within any designated municipal watershed area (except at locations designated for these purposes by a jurisdictional agency).
 - 7.5.4. Except when site conditions prevent access, Contractor shall refuel all construction equipment at least 100 feet from any water body). If refueling of construction equipment is required within 100 feet of a water body, Contractor shall comply with the project-specific Spill Prevention and Response Procedure.
 - 7.5.5. Contractor shall place all spoil from water body crossings and upland spoil from major water body crossings in the construction ROW at least 10 feet from the water's edge or in extra work areas designated by the Company Representative. Contractor shall install sediment barriers to prevent spoil from flowing into any water body.
 - 7.5.6. Contractor shall design, install, and maintain equipment bridges to withstand and pass the highest flow rate that could be expected to occur while the bridge is in service.

Contractor may not use soil to construct or stabilize equipment bridges. Contractor shall construct equipment bridges using one of the following methods as allowed by permit conditions:

- Equipment pads and culvert(s). Refer to Company [Construction Drawing CST-P-1000-A145 – Typical Temporary Paved Road Access Pad](#).
- Equipment pads or railroad car bridges without culverts. Refer to Company [Construction Drawing CST-P-1000-A350 – Typical Timber Mat Water Body Bridge](#).
- Clean rock fill and culvert(s). Refer to Company [Construction Drawing CST-P-1000-A335 – Typical Water Body Bridge Rockfill and Flume](#).
- Flexi-float or portable bridges. Refer to Company Construction Drawings [CST-P-1000-A340 – Typical Portable Water Body Bridge](#), [CST-P-1000-A345 – Typical Portable Water Body Bridge with Culver Support](#), and [CST-P-1000-A355 – Typical Flexi-Float Water Body Bridge](#).
- When pre-approved by the Company Representative, alternate methods/designs (which achieve the performance objectives specified above) may be used.

- 7.5.7. Contractor shall maintain equipment bridges to prevent soil from entering the water body.
- 7.5.8. Unless the applicable agency authorizes a bridge as 'permanent', Contractor shall remove equipment bridges as soon as possible after permanent seeding.
- 7.6. Contractor shall complete water body crossings in conformance with the Scope of Work, associated site-specific drawings or permit conditions. Crossing methods include:
- Dam and pump method. Refer to site-specific Construction drawing. Absent site-specific Construction drawings, refer to [CST-P-1150-A370 – Water Body Crossing Open Cut Dam and Pump](#).
 - Dry-ditch method. Refer to site-specific Construction drawing. Absent site-specific Construction drawings, refer to [CST-P-1150-A280 – Typical Non-Flowing Water Body Crossing Open Cut Trench](#).
 - Flume crossing method. Refer to site-specific Construction drawing. Absent site-specific Construction drawings, refer to [CST-P-1150-A375 – Water Body Crossing Open Cut Dry Flume](#).
 - Horizontal directional drill method. Refer to site-specific Construction drawing. Absent site-specific Construction drawings, refer to [CST-P-1150-A375 – Water Body Crossing Horizontal Directional Drill](#).
- 7.7. Contractor shall install sediment barriers immediately after disturbing the water body (or adjacent upland) to prevent soil erosion or sedimentation from flowing into the wetland or water body. Sediment barriers shall be maintained throughout construction and reinstalled when necessary (such as after backfilling the trench), until they are replaced by permanent erosion controls and/or adjacent upland areas are completely restored.
- 7.8. Trench dewater shall be filtered to prevent heavily silt-laden water discharge into any wetland or water body. The filtration system shall be installed on the ROW or within areas approved by the Company Representative. Refer to Company Construction Drawings [CST-P-1000-A165 – Typical Geotextile Filter Bag for Dewatering](#) and [CST-P-1000-B170 – Typical Straw Bale Dewatering Structure Large Volume](#).
- 7.9. Water body crossing restoration activities shall be completed in conformance with the Scope of Work or site-specific permit conditions.

8. Wetland Crossings

- 8.1. Contractor shall install wetland crossings in conformance with the Scope of Work, Construction drawings or permit conditions. Company Representative must approve any changes in work areas.

- 8.2. The Contractor shall implement all construction procedures for water body crossings in the event the wetland crossing is located adjacent to or within a wetland.
- 8.3. General work area requirements:
- 8.3.1. Contractor shall only use extra work areas (such as staging areas and additional spoil storage areas) identified in the Scope of Work or Construction drawings as permit conditions allow.
- 8.3.2. Contractor shall limit vegetation clearing between extra work areas and the wetland edge to the Company-authorized construction ROW.
- 8.3.3. Contractor may use construction ROW for access only when wetland soil is stabilized to a degree that allows equipment passage without creating ruts. Stabilization of ROW may be accomplished with timber riprap, prefabricated equipment mats, or terra mats.
- 8.3.4. Contractor shall ensure that all construction equipment other than that necessary to install the wetland crossing shall use access roads located in upland areas. Prior to placement of wetland matting, and where access roads in upland areas do not provide reasonable access, Contractor shall limit all other construction equipment to one pass through the wetland using the construction ROW.
- 8.3.5. Company Representative shall approve extra work areas prior to use.
- 8.4. General wetland crossing procedures and requirements:
- 8.4.1. Contractor shall comply with Section 404, Nationwide Permit Program Terms and Conditions (33 CFR Part 330) or as directed by the Company Representative.
- 8.4.2. Contractor shall assemble pipeline in an upland area unless the wetland is dry enough to support skids and pipe. Where water and other site conditions allow, Contractor shall use 'push-pull' or 'float' techniques to place the pipe in trench. Refer to site-specific drawings or to [CST-P-1260-A390.1 – Typical Push Pull Wetland Crossing](#) and [CST-P-1260-A390.2 – Typical Push Pull Wetland Crossing](#).
- 8.4.3. Contractor shall minimize the duration of construction-related disturbance within wetlands as allowed by permit.
- 8.4.4. Contractor shall not store hazardous materials, chemicals, fuels, or lubricating oils in a wetland or within 100 feet of any wetland boundary. Contractor shall not perform concrete coating activities in a wetland or within 100 feet of any wetland boundary.
- 8.4.5. Except when site conditions prevent access, Contractor shall refuel all construction equipment in upland areas at least 100 feet from a wetland boundary. If refueling of construction equipment is required in a wetland or within 100 feet of any wetland boundary, Contractor shall comply with the project-specific Spill Prevention and Response Procedure.
- 8.4.6. Contractor shall limit construction equipment operating in wetland areas to that necessary to clear the ROW, dig trench, fabricate and install pipeline, backfill trench and restore ROW. Refer to site-specific drawings or to [CST-P-1260-A380.1 – Typical Wetland Crossing](#) and [CST-P-1260-A380.2 – Typical Wetland Crossing](#). All other construction equipment shall use approved access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, Contractor shall limit all other construction equipment to one pass through the wetland using the ROW.
- 8.4.7. Contractor shall clear vegetation by cutting it off at the ground level, leaving existing root systems in place. Contractor shall remove cut vegetation from the wetland for disposal.

- 8.4.8. Contractor shall limit grading activities and removing tree stumps to areas directly over the trench line. Contractor shall not grade or remove stumps or root systems from other wetland areas of the ROW unless the Company Representative determines that safety-related construction constraints require the removal of tree stumps from the working side of the ROW.
- 8.4.9. Contractor shall segregate the top foot of topsoil from the area disturbed by trenching. In areas with less than 12-inches of topsoil, Contractor shall segregate the entire topsoil layer disturbed by trenching. Soil separation is not required where standing water or soils are saturated or frozen. Immediately after backfilling is completed, Contractor shall restore segregated topsoil to its original location.
- 8.4.10. In standing water or saturated soils, Contractor shall use low ground-weight construction equipment or operate normal equipment from timber riprap, prefabricated equipment mats, terra mats, or equivalent (to prevent mixing of topsoil and subsoil).
- 8.4.11. Contractor shall not cut trees outside the construction ROW to obtain timber riprap or equipment mats. Contractor shall use no more than two layers of timber riprap to stabilize ROW.
- 8.4.12. Contractor shall remove all timber riprap, prefabricated equipment mats, or other material used to support equipment on the construction ROW when restoring to pre-construction conditions.
- 8.4.13. Contractor shall remove water from the trench to prevent heavily silt-laden water from flowing into any wetland. Contractor shall remove dewatering structures as soon as possible after dewatering activities are completed. Refer to Company Construction Drawings [CST-P-1000-A165 – Typical Geotextile Filter Bag for Dewatering](#) and [CST-P-1000-B170 – Typical Straw Bale Dewatering Structure Large Volume](#).
- 8.4.14. Contractor shall install sediment barriers across the entire construction ROW immediately upslope of the wetland boundary at all wetland crossings (to prevent sediment flow into adjacent wetlands).
- 8.4.15. Contractor shall install sediment barriers along the edge of the construction ROW (to prevent sediment flow into adjacent wetlands and contain spoil and sediment within the ROW).
- 8.4.16. Contractor shall remove all sediment barriers during ROW cleanup.
- 8.5. Restoration of wetland crossings shall include:
- 8.5.1. Contractor shall construct trench breakers and/or seal the trench bottom (to maintain the original wetland hydrology).
- 8.5.2. To avoid transporting sediment into wetlands, Contractor shall install:
- Permanent slope breakers across the construction ROW.
 - Trench breakers at the base of slopes greater than 5% where the base of the slope is less than 50 feet from the wetland boundary.
 - Trench breakers between wetlands and adjacent disturbed upland area, where required.
- In areas adjacent to wetlands, earthen berms may be used as sediment barriers when approved by the Company Representative.
- 8.5.3. Contractor shall comply with the wetland restoration plan as directed by Company Representative. Contractor shall prevent the introduction or spread of undesirable exotic vegetation.
- 8.5.4. When final revegetation and stabilization of upland areas are accepted (in conformance with applicable standards) by the Environmental Inspector or Company

Representative, the Company (or Contractor, if designated) shall remove all remaining temporary sediment barriers.

9. Hydrostatic Testing

- 9.1. Contractor shall use water sources and at locations only as permitted in the Scope of Work or as approved by the Company Representative.
- 9.2. Contractor shall discharge hydrotest water at locations only as permitted in the Scope of Work or as approved by the Company Representative.
- 9.3. Contractor shall keep the Company Representative informed of testing schedules, so that required notifications to agencies or landowners are completed in compliance with permit conditions.
- 9.4. Contractor shall notify Company Representative immediately upon a hydrotest failure, so that required notifications to agencies or landowners are completed in compliance with permit or other statutory requirements.
- 9.5. Contractor shall pre-clean facilities, dispose of waste, and dry facilities in conformance with the Scope of Work, the approved Waste Management Plan and all applicable waste regulations. See [Waste Management](#) Section for additional Waste Management requirements.
- 9.6. The following general requirements shall be met for all hydrotesting projects:
 - 9.6.1. Contractor shall perform radiographic inspection in compliance with [Construction Standard C1070 - Non-Destructive Examination Requirements](#) before installation under water bodies or wetlands.
 - 9.6.2. If pumps used for hydrostatic testing are located within 100 feet of any water body or wetland, Contractor shall operate and refuel pumps in compliance with the project's Spill Prevention and Response Procedure.
 - 9.6.3. Contractor shall screen the intake hose to prevent entraining fish.
 - 9.6.4. Contractor shall maintain flow rates to protect aquatic life, provide for all water body uses, and provide for downstream water withdrawals by existing users.
 - 9.6.5. Contractor shall locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.
- 9.7. Contractor shall regulate discharge rates, use energy dissipation devices, and install sediment barriers as necessary to prevent erosion, streambed scour, sediment suspension, or excessive stream flow in compliance with permit conditions. Refer to Company Construction Drawings [CST-P-1260-A180.1 – Typical Silt Fence Sediment Barrier Erosion Control](#), [CST-P-1260-A180.2 – Typical Silt Fence Sediment Barrier Erosion Control](#), [CST-P-1260-A190.1 – Typical Straw Bale Sediment Barrier Erosion Control](#) and [CST-P-1260-A190.2 – Typical Straw Bale Sediment Barrier Erosion Control](#).

10. Cleanup Procedures

- 10.1. Contractor shall commence cleanup operations immediately following backfill operations.
- 10.2. Unless otherwise approved by the Company Representative, Contractor shall complete final cleanup and install permanent erosion control structures within 14 days (10 days in residential areas) after trench is backfilled or construction on surface facilities is completed.
 - 10.2.1. If seasonal or other weather conditions prevent compliance with Cleanup deadlines, all temporary erosion-control structures shall be maintained as originally installed

until conditions allow cleanup completion as approved by the Company Representative.

- 10.3. Contractor shall backfill and regrade to restore final grade (pre-construction contours) and leave soil in condition for planting.
- 10.4. In agricultural fields and residential areas where slope breakers are not typically required, Contractor shall install trench breakers at the same spacing as if permanent slope breakers were required. If the Company determines that additional trench breakers are required, Contractor shall install breakers as directed.
- 10.5. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered removable construction debris, unless approved for alternate use by the landowner or land managing agency.
- 10.6. Segregated topsoil shall not be used to pad the pipeline.
- 10.7. Contractor shall de-compact subsoil and topsoil as identified in the Scope of Work, Construction drawings, or ROW line list. Contractor shall test for de-compaction in conformance with permit conditions or landowner request.
- 10.8. Contractor shall remove excess rock from at least the top 12-inches of soil in all actively cultivated or rotated cropland and pastures, hayfields, residential areas, and in other areas at the landowner's request.
- 10.9. Geomorphic features such as embankments, terraces, and slopes shall be restored. BMP's shall be used to stabilize streambeds and banks, natural drainage ways, and steep grades in conformance with permit requirements.
- 10.10. Contractor shall construct and maintain permanent slope breakers in all areas except cultivated areas and lawns using the spacing recommendations in [Table C1260 / 3.4 – Right-of-Way Slope %](#).
 - 10.10.1. If a local soil conservation authority or land-managing agency requires additional slope breakers, Contractor shall install additional slope breakers as directed.
- 10.11. Contractor shall mulch all slopes adjacent to wetlands and waterbodies with 3 tons per acre of weed-free hay or straw for a minimum of 10 feet on either side of the wetland or water body.
- 10.12. Contractor shall leave a travel lane open along the ROW to allow construction traffic access. The travel lane shall be restored when access to the ROW is no longer required for construction or revegetation.
- 10.13. Contractor shall collect all trash, litter, and foreign debris for disposal as directed by Company Representative and in conformance with the approved Waste Management Plan and all applicable waste regulations. Trash, litter, and construction material debris shall **not** be discarded in the trench or along the ROW.
- 10.14. Contractor shall repair all structures, fences, hedges, buildings, and/or other property damaged during construction as required by the landowner and/or Company Representative. Contractor shall **immediately** repair all damage incurred during construction when such repair is too urgent to be relegated to a cleanup crew.
- 10.15. Contractor shall install permanent slope breakers (terraces) along the ROW where requested by the Company Representative, specified in this Section, or in conformance with the Scope of Work. Concentrations of surface flow shall be diverted to stabilized outlets using slope breakers with a 2% to 8% outslope directed toward energy-dissipating devices located off the ROW. Refer to Company Construction Drawings [CST-P-1260-A220.1 – Typical Slope Breaker](#) and [CST-P-1260-A220.2 – Typical Slope Breaker](#).

11. Revegetation

- 11.1. Contractor shall perform revegetation activities in conformance with the Scope of Work, Construction drawings, ROW line list, or permit conditions, including:
- Fertilize and amend areas
 - Prepare seedbed
 - Seed with specified seed mixtures
 - Install mulch or temporary cover
 - Remove temporary erosion control structures where revegetation is accepted by the Company Representative
- 11.2. Contractor shall perform seeding in all areas except actively-cultivated croplands and surface facilities as directed by the Company Representative.
- 11.3. Contractor shall continue using temporary erosion-control measures, if seeding cannot be done within recommended seeding dates as directed by Company Representative.
- 11.4. Contractor shall mulch all slopes (except in actively-cultivated cropland) concurrently or immediately after seeding (where necessary to stabilize the soil surface and to reduce wind and water erosion).
- 11.4.1. Contractor shall mulch before seeding if:
- Final grading and installation of permanent erosion-control measures will not be completed within 14 days after the trench in that area is backfilled (10 days in residential areas)
 - Construction or restoration activity is interrupted for extended periods (e.g. when seeding cannot be completed due to seeding period restrictions)
- 11.4.2. Jute thatching or bonded fiber blankets shall be accepted as alternatives to straw mulch. Biodegradable erosion control fabric shall be used on water body banks to stabilize seeded areas and other sensitive areas (where using mulch and anchoring tools is impractical).
- 11.5. Contractor shall install and maintain vehicle control measures as directed by the Company Representative. These measures may include, but are not limited to:
- Signs
 - Fences with locking gates
 - Slash and timber barriers, pipe barriers, or line of boulders across the ROW
 - Conifers or other specified trees or shrubs planted across the ROW

12. Spill Prevention, Control and Countermeasures

- 12.1. The Contractor shall prepare a Spill Prevention, Control, and Countermeasures (SPCC) plan when required by applicable federal, state, or local regulations for storing oil to support construction activities. A copy of the Contractor's SPCC plan must be submitted to the Company.
 - 12.1.1. For projects occurring at existing Company facilities, Contractor shall coordinate with Company Representative and EHS to ensure that project related oil storage is in compliance with the facility SPCC Plan.
- 12.2. Company shall prepare or update facility SPCC plan as applicable. For facilities (new or existing) with SPCC requirements, facility designs shall be reviewed with EHS prior to start of construction to ensure that all regulatory requirements, such as secondary containment and tank requirements, are fulfilled.
 - 12.2.1. For new SPCC facilities (including existing facilities that were previously below oil storage threshold for SPCC applicability) per EPA regulations, the SPCC plan must be completed and certified before Contractor can bring oil on site. This also means that all spill control and containment provisions have been completed per the SPCC plan.

13. Waste Management

- 13.1. Contractor shall manage all wastes in accordance with all applicable federal, state and local laws and regulations. Additionally, the Contractor shall manage all waste in accordance with the Company provided Waste Management Plan, including utilization of Company approved disposal facilities.
 - 13.1.1. Contractor shall notify Company of any waste streams will be generated that are not shown on the approved Waste Management Plan, prior to generating the waste.
 - 13.1.2. Contractor shall make efforts to minimize the amount of waste generated during a project by reducing waste generation at the source whenever possible.
 - 13.1.3. If Contractor would like to deviate from the approved Waste Management Plan, alternatives must be presented to Company for review with EHS prior to sending waste to an un-approved facility.
- 13.2. Prior to generating waste that is likely to be classified as a hazardous waste, Contractor shall consult with Company to ensure that proper procedures are followed
 - 13.2.1. For Projects that will generate volumes of hazardous wastes triggering Small Quantity or Large Quantity Generator status, Contractor shall coordinate with Company Representative before the start of the project to ensure that all regulatory requirements are satisfied, including, but not limited to creation of contingency plans, hazardous waste storage requirements, and transportation requirements.

**Hiland Crude, LLC
a subsidiary of
Kinder Morgan, Inc.**

**Gullickson Reroute Pipeline
Project
McKenzie County
North Dakota**

**HDD INADVERTENT RETURN
MITIGATION PLAN**

1. OBJECTIVE

The objective of this plan is to minimize the impact of a potential inadvertent return of drilling muds during horizontal directional drilling (HDD) operations by planning, early detection, and adequate containment of the HDD mud.

2. PLANNING AND PREVENTION

Before commencement of operations, the proposed HDD plan shall be reviewed in the event of an inadvertent return. Before any HDD occurs, a safety meeting will take place to discuss the HDD operation and Inadvertent Return (IR) Plan, including mitigation. Erosion and sediment controls will be installed at the HDD entrance/exit pits, as needed. Spill cleanup materials will be kept on-site at a designated location.

During operation of an HDD, pipeline construction personnel will monitor the pipeline drill path throughout the process. Field crews are to be briefed on what to watch for and will be made aware of the importance of timely detection and response to any IR throughout the drill. If the HDD operator observes a major change in fluid pressure or loss of circulation, the operator will notify the field crews of the approximate position of the drill head. A spotter will monitor the immediate area to scout for a potential surface discharge.

The HDD Operations On-Site Foreman will have the responsibility and authority for executing the Inadvertent Return Mitigation Plan (IRMP). The On-Site Foreman shall be competent in all aspects of the HDD drilling activity and the IRMP. The IRMP will be retained on-site. Prior to the start of drilling operations, the On-Site Supervisor will ensure that workers are properly trained and familiar with the necessary procedures for response to an inadvertent return. In the event of an inadvertent return, timely notification will be made to the Construction and Environmental Inspectors to ensure prompt response and assembly of containment structures.

The first action required when an inadvertent return is detected is to minimize the volume of drill fluid that is released. This will be done by immediately halting pumping of drill fluid downhole. Pumping will not resume until the situation is assessed and, if possible, the fluid release is contained and controlled. As it is probable that the inadvertent return will resume as soon as fluid pumping starts again, containment and control measures will have to be able to contend with a further release of fluid. Normally, the inadvertent return stops of its own accord when the drilling assembly progresses a short distance ahead of the release point.

The risk of failure of the HDD installation increases dramatically as the duration over which pumping is halted increases. Hence, actions will be taken quickly in order that pumping may resume as quickly as possible.

In the event of an inadvertent return:

1. Locate the inadvertent return to determine what containment structure would best contain the inadvertent return with minimal impact to the property.
2. Promptly notify the On-Site Supervisor and the Environmental Inspector.

3. Kinder Morgan Environmental Staff will promptly notify applicable regulatory agencies, which may include the North Dakota Department of Environmental Quality.
4. Install the appropriate containment measures, as needed, to contain and recover the drilling mud (i.e., dam and pump, or silt fence and hay bales).
5. If the inadvertent return cannot be controlled, initiate immediate suspension of drilling operations until appropriate containment is in place.
6. If an inadvertent return occurs at or near a river /creek:
 - a. Promptly notify the appropriate river authority.
 - b. All vehicle operation, fueling, and maintenance shall be restricted to above the bank of the river/creek, unless consent is received from the appropriate river authority.
 - c. Barrier Mitigation Prevention (BMP) shall be in place to contain any spills of drilling mud or fuel.
 - d. Remove all debris, smooth, and revegetate any disturbed areas.

The following items will be available at all times to the HDD drilling crews for containment, response, and clean-up

- Hay bales
- Silt fence
- Sand bags
- Plastic sheeting
- Shovels, brooms, and appropriate hand tools
- Generator, pump, and hose
- Frac tank or mud pit large enough for excess mud
- Vacuum truck
- MSDS for the drilling mud and additives
- Silt curtain/absorbant booms (in-water work)
- Light towers for work at night
- Heavy equipment, such as backhoe or dozer, for containment and cleanup of drilling mud
- Boat for major waterbody crossings to allow for monitoring of releases to water



McKENZIE COUNTY

Sir/Madame,

After review of your noxious weed containment plan, I have found that it meets all North Dakota and McKenzie County Weed Law requirements.

PLEASE PRINT AND ATTACH THIS EMAIL TO YOUR C.U.P. TO SHOW YOU HAVE COMPLIED WITH STATE AND COUNTY WEED LAW FOR ERADICATION AND CONTAINMENT OF McKenzie COUNTY NOXIOUS WEEDS.

Also, remember that your property will be periodically and randomly inspected for compliance with your proposed form of weed control – so please be diligent in your efforts to help us with this problem.

Thank you for helping in our continuing efforts to keep McKenzie County noxious weed free.

Sincerely,

Amber Higgins

McKenzie County Weed Officer

Office 701-842-4131

Fax 701-842-4731

McKenzie County Weed Management Plan

Purpose: This is a simplified weed management template that is specifically designed for small properties/areas. It is designed to assist in controlling noxious weeds by documenting areas at risk whether it be currently infested or could possibly become infested in the future. This weed management template is also to assist in coordinating efforts between McKenzie County Weed Control and landowners/operators/developers to accomplish noxious weed control goals in McKenzie County. A copy of this weed management plan will be kept on file with McKenzie County Weed Control as well as with all parties involved in the ownership and/or management of the property.

Date: 2/10/25

Circle or Check One: PRIVATE COMMERCIAL

Name of Landowner: Several landowners

Name of Party Responsible for Weed Control if Different than Landowner: Hiland Crude, LLC (Hiland), Eric Jensen

Address of Responsible Party: 8811 S Yale Ave, Suite 200, Tulsa, OK 74137

Phone Number: 918-588-5060 Email Address: Eric_Jensen@kindermorgan.com

Approximate Size of Property: 3.4 miles in length

Legal Description of Property:

Quarter Section Select Section Select Township Select Range Select

See attached map.

Purpose of Property: Construction of a 3.4 mile crude oil pipeline to increase export capacity from the Bakken.

Surface Movement for Commercial Construction Purposes: Circle or check one

Scoria Manure Dirt Sand Gravel
Construction Other

1.0 Management Goals:

Management goals describe the purpose/use of the property and what you are trying to achieve. Having clear management goals is key to developing a weed management plan. (The minimum amount required by North Dakota and McKenzie County Weed Law is to mow noxious weeds to prevent them from going to seed. Another management goal may be to restore an area with native vegetation. Management goals might also include preventing contamination and/or spread of noxious weeds due to mining or storage of construction materials by a yearly or bi-yearly application of herbicide.)

Please list your management goals as they apply to this property:

The attached Noxious Weed Management Plan outlines Hiland's management goals for the project.

2.0 Weed Control Objectives:

Knowing which weed species occur on your property and where they are located is very important in developing control priorities. Weed species vary considerably in the threat that they pose to the resource values of the property. In addition, weed species vary greatly in their susceptibility to control measures. Thus, weed species that pose the greatest threat to achieving the management goals for the property and which can be most easily controlled are the highest priority for management. To create weed control objectives for your weed management plan, first search your property for weeds (if you have not already done so).

3.0 Weed Control Objectives – 3-year plan

1st Year Weed Control Objective: Hiland did not identify any noxious weeds occurring within
its proposed ROW. Year 1 will entail implementation of preventative measures and general
treatment methods during construction. Refer to attached Noxious Weed Management Plan.

2nd Year Weed Control Objective: Years 2 and 3 will entail monitoring of noxious weeds
during restoration and re-vegetation to control spread of weeds and apply treatments, as
needed. Refer to attached Noxious Weed Management Plan.

3rd Year Weed Control Objective: See above.

4.0 Evaluating Weed Control:

After you have created weed control objectives and have begun to control the priority weed species on your property, you should evaluate the results of your control methods. This requires follow-up visits to the areas where weeds were controlled and a re-assessment of the size and density of an infestation. (For example, compare the size of the infestation after a growing season has elapsed to the size before control actions were initiated.) In most cases, the elimination of an infestation will take several years with multiple treatments per year to kill the plants and eliminate the bank of weed seeds in the soil.

ND Law 4.1-47. Control of noxious weeds.

Each Person shall do all things necessary and proper to control the spread of noxious weeds.

In signing this document, I understand that I will be responsible for noxious weed control on the property listed above.

Responsible Party Signature: Eric Jensen Digitally signed by Eric Jensen
Date: 2025.02.10 15:59:05 -06'00' Date 2/10/2025

McKenzie County
Weed Board Approval:  Date 2-11-2025

Please allow 48 hours for review of this plan prior to receiving confirmation of approval.



Hiland Crude, LLC
a subsidiary of Kinder Morgan

Gullickson Reroute Pipeline Project
McKenzie County, North Dakota

Noxious Weed Management Plan

Prepared by:



February 2025

CONTENTS

1	Introduction	1
1.1	Project Description	1
1.2	Location and Description of Facilities	Error! Bookmark not defined.
1.3	Plan Overview.....	1
2	Noxious Weed Regulation and Management	Error! Bookmark not defined.
3	Noxious Weed Inventory.....	Error! Bookmark not defined.
4	Noxious Weed Management	Error! Bookmark not defined.
5	Identification of Problem Areas	1
6	Preventive Measures	4
6.1	General Preventive Measures	4
6.2	Equipment Cleaning	5
7	Treatment Methods	5
7.1	General Treatment Methods	6
7.2	Treatment Schedule	7
7.3	Treatment Approach during Restoration and Revegetation.....	7
8	Post-Construction Monitoring	8
9	Herbicide Application, Handling, Spills, and Cleanup	8
9.1	Herbicide Application and Handling	8
9.2	Herbicide Spills and Cleanup.....	9
10	References	11

ABBREVIATIONS AND ACRONYMS

APHIS	Animal and Plant Health Inspection Service
CFR	Code of Federal Regulations
EI	Environmental Inspector
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
NDDA	North Dakota Department of Agriculture
NGL	Natural Gas Liquid
NRCS	Natural Resources Conservation Service
Project	Hiland Express Gullickson Pipeline Project
ROW	right-of-way
SPCC Plan	Spill Prevention, Control, and Countermeasure Plan
TWS	Temporary Workspace
USDA	U.S. Department of Agriculture

1 INTRODUCTION

1.1 Project Description

Hiland Crude, LLC (Hiland), a subsidiary of Kinder Morgan, Inc., is currently planning construction of the Gullickson Reroute Pipeline Project (Project), located in Mackenzie County, North Dakota. The Project will include approximately 3.4 miles of 8-inch steel crude oil pipeline located north of Cartwright, ND near the confluence of the Missouri and Yellowstone Rivers.

1.2 Plan Overview

The goal of the Noxious Weed Management Plan is to prevent the spread of existing noxious weeds identified in Project areas by implementing prevention and control mitigation measures where applicable and appropriate. The Noxious Weed Management Plan is specifically for areas of ground disturbance that are within existing noxious weed infestations or areas of known noxious weed occurrence. Monitoring during construction and operation of the Project would include inspection of existing weed populations and identification of new weed populations on or immediately adjacent to Project areas. Monitoring activities would evaluate the level of success and efficiency of the control measures implemented.

Hiland environmental staff, the Environmental Inspector (EI), and construction contractors would be responsible for carrying out the practices described in this Noxious Weed Management Plan, which is applicable to both the construction and operation phases of the Project.

Noxious weed control practices for the Project described in this Noxious Weed Management Plan have been developed utilizing information from the following sources:

- Federal Noxious Weed Program (U.S. Department of Agriculture [USDA] 2023)
- Natural Resources Conservation Service (NRCS) (USDA NRCS 2022)
- North Dakota Department of Agriculture (NDDA) Noxious Weed and Invasive Species List (NDDA 2021)
- Observations made during field surveys

2 NOXIOUS WEED REGULATION AND MANAGEMENT

This section provides a brief overview of federal and state legislation and regulatory compliance applicable to noxious weeds in the Project area. Hiland will conduct Project activities in accordance with all local, state, and federal regulations regarding the control and management of noxious weeds.

2.1 FEDERAL REGULATIONS

The U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) is a federal noxious weed program designed to prevent the introduction of nonindigenous invasive

plants into the U.S. APHIS noxious weed activities include exclusion and permitting in cooperation with other federal agencies and state agencies, and integrated management of introduced weeds, including biological control.

2.2 STATE REGULATIONS

The Project is located in McKenzie County in North Dakota. At the state and county levels, the Agricultural Commissioner and County Weed Officers are responsible for organizing a noxious weed control or eradication program with all political subdivisions within North Dakota that own, control, or have jurisdiction over land (North Dakota Century Code [NDCC], 2024).

NDCC Chapter 4.1-47 defines a noxious weed as a plant propagated by either seed or vegetative parts, and determined to be injurious to public health, crops, livestock, land, or other property. Additionally, this chapter states that each person must do all things necessary and proper to control the spread of noxious weeds; makes it illegal for any person to distribute, sell, or offer for sale a noxious weed within the state; and defines the duties of the Agriculture Commissioner, including maintaining the State Noxious Weed List (NDCC, 2024).

Per NDCC Chapter 4.1-47-30:

- a person may not willfully transport any material that contains noxious weed seeds or propagating parts on a public road, in a manner that allows for the dissemination of noxious weeds;
- a person may not willfully drive or transport any equipment on a public road, in a manner that allows for the dissemination of noxious weeds; and
- a person may not willfully dispose of any material that contains noxious weed seeds or propagating parts in a manner that allows for the dissemination of noxious weeds.

2.3 STATE AND COUNTY LISTED NOXIOUS WEEDS

The control of thirteen declared state noxious weeds is enforced by all cities and counties within North Dakota. Cities and counties have the option to add additional weeds for control enforcement only in their jurisdiction. Table 3.3-1 provides a list of the declared noxious weeds enforced within the counties and cities crossed by the Project according to the State Noxious Weeds List (North Dakota Department of Agriculture [NDDA], 2023a) and the County and City Noxious Weeds List (NDDA, 2023b). In addition to the NDDA noxious weed and invasive species list, localized weed boards within each county manage noxious weeds and invasive species and may develop a list of additional weeds for enforcement within their jurisdiction. McKenzie County has designated four additional species as noxious weeds. The Project is not located within the jurisdiction of any city.

Table 3.3-1 includes a list of the statewide noxious and regulated weeds enforced within the counties crossed by the Project.

TABLE 3.3-1

State and County Enforced Noxious Weeds

Common Name/ Species Category	Scientific Name	Habitat	Enforcement Area
Absinth wormwood	<i>Artemisia absinthium L.</i>	Terrestrial	All cities and counties in North Dakota ^a
Baby's breath	<i>Gypsophila paniculata L.</i>	Terrestrial	McKenzie County ^b
Black henbane	<i>Hyoscyamus albus</i>	Terrestrial	McKenzie County ^b
Canada thistle	<i>Cirsium arvense</i>	Terrestrial	All cities and counties in North Dakota
Common burdock	<i>Arctium minus</i>	Terrestrial	McKenzie County ^b
Dalmatian toadflax	<i>Linaria dalmatica</i>	Terrestrial	All cities and counties in North Dakota
Diffuse knapweed	<i>Centaurea diffusa</i>	Terrestrial	All cities and counties in North Dakota
Halogeton	<i>Halogeton glomeratus</i>	Terrestrial	McKenzie County ^b
Houndstongue	<i>Cynoglossum officinale</i>	Terrestrial	All cities and counties in North Dakota
Leafy spurge	<i>Euphorbia esula</i>	Terrestrial	All cities and counties in North Dakota
Musk thistle	<i>Carduus nutans L.</i>	Terrestrial	All cities and counties in North Dakota
Palmer amaranth	<i>Amaranthus palmeri</i>	Terrestrial	All cities and counties in North Dakota
Purple loosestrife	<i>Lythrum salicaria</i>	Aquatic	All cities and counties in North Dakota
Russian knapweed	<i>Acroptilon repens, Rhaponticum repens</i>	Terrestrial	All cities and counties in North Dakota
Saltcedar	<i>Tamarix spp.</i>	Terrestrial	All cities and counties in North Dakota
Spotted knapweed	<i>Centaurea stoebe, C. maculosa</i>	Terrestrial	All cities and counties in North Dakota
Yellow toadflax	<i>Linaria vulgaris</i>	Terrestrial	All cities and counties in North Dakota

^a Source: <https://www.ndda.nd.gov/divisions/plant-industries/noxious-weeds> (2023a).

^b Source: <https://www.ndda.nd.gov/sites/www/files/documents/files.pdf> (2023b).

3 NOXIOUS WEED INVENTORY

Project biologists surveyed the Project area for noxious weeds concurrently with wetland, waterbody, and threatened and endangered species surveys in September-November 2024. The survey occurred along the proposed 3.4-mile right-of-way (ROW) corridor and along access roads. Project biologists did not identify any noxious weeds within the planned Project Corridor.

4 NOXIOUS WEED MANAGEMENT

This Noxious Weed Management Plan outlines the approach to identifying problem areas and identifies preventive measures that would be implemented within Project sites if noxious weeds are present. The primary goals of the mitigation measures are to prevent the spread of noxious weeds, should they be encountered, and avoid the introduction of new noxious weeds. This plan also describes herbicide treatment that should be carried out if target species are observed within the Project area and how risk to adjacent native species can be avoided or mitigated. If herbicides are warranted, Hiland will adhere to U.S. Environmental Protection Agency (EPA) and NDDA herbicide requirements. It should be noted that repeated control measures are not always considered successful for certain weed species that are already well established and abundant. For example, most land management agencies recognize that the widespread distribution of some non-native species, such as cheatgrass (*Bromus tectorum*) and some other grasses, precludes the reasonable possibility of eradication. For this reason, widespread invasive species that are not legally considered noxious would not be treated.

Vegetation surveys and monitoring will be conducted as part of post-construction restoration and revegetation activities and will identify areas, if any, where noxious weed species would need to be treated. Project weed-control contractors would treat noxious weed populations as identified through monitoring.

5 IDENTIFICATION OF PROBLEM AREAS

Prior to construction, contractors would be provided with information and training regarding noxious weed identification, noxious weed management/containment, and the potential impacts of noxious weeds on agriculture, livestock, and wildlife. Contractors will be informed of the importance of preventing the spread of noxious weeds to uncontaminated areas and of controlling the proliferation of weeds already present.

The fall 2024 field surveys of the Project area did not observe any infestations of noxious weeds. However, prior to construction, if noxious weeds are present, then weed management procedures will be implemented and consist of the following:

- Identifying noxious weed infestation areas of concern before vegetation and soil disturbance activities begin.
- Marking noxious weed areas with signage placed by construction personnel or the EI on the ROW (or on the edge of the ROW after clearing and grading) to alert construction personnel to the location and nature of each weed infestation.

6 PREVENTIVE MEASURES

Hiland would comply with agency preventive requirements and implement weed control measures in Project areas identified to be of special concern. This section describes general preventive measures to be implemented to minimize the spread of noxious weeds if infestations are observed prior to construction.

6.1 General Preventive Measures

During pre-construction environmental training, noxious weed-specific topics would be discussed and implemented before surface disturbance activities begin. Project personnel will be trained on the identification of weed species that could potentially occur within the Project area and Project-approved weed prevention and control methods. Other general preventative measures include the following:

- Within Project ROW or temporary workspace (TWS) boundaries where high-density (26 percent and higher ground cover) noxious weed populations are identified in the field, the contractor would stockpile cleared vegetation and salvaged topsoil adjacent to the area from which they were stripped in order to prevent the transport of soil-borne noxious weed seeds, roots, or rhizomes to other areas. If this process is carried out correctly, subsequent equipment would be able to pass through the site with little risk of becoming contaminated with seeds or other weed propagules.

- Weed-infested stockpiles would be marked with clearly visible signage until the restoration phase. During restoration, the contractor would return topsoil and vegetative material from infestation sites to the areas from which they were stripped and would not move soil and/or vegetative matter outside of the identified and marked noxious weed infestation areas.
- The contractor would ensure that straw or hay bales used for sediment barrier installations or mulch distribution, where appropriate, are certified weed-free and obtained from state-cleared sources. If certified weed-free bales are unavailable, alternative weed-free sediment barrier installations would be utilized.

6.2 Equipment Cleaning

Although no noxious weed areas were identified during the 2024 field surveys, if noxious weed areas are present just prior to construction, equipment-cleaning procedures would be implemented. Equipment-cleaning procedures to prevent the transportation of weed seed, roots, or other propagules at the Project site would consist of the following guidelines:

- Contractor vehicles and equipment, including mats, arriving on-site for the first time would be cleaned prior to accessing the Project site.
- Cleaning efforts would be concentrated on tracks, feet, tires, and on the undercarriage, with special emphasis on axles, frames, cross members, motor mounts, the underside of running boards, and front bumper/brush guard assemblies. If the weather conditions and ROW conditions are dry and vehicles are relatively mud-free, compressed air can be used. If wet or muddy conditions exist, vehicles and equipment would be cleaned with high-pressure water.
- Equipment and vehicles used to move vegetation and topsoil during Project clearing and restoration phases would be cleaned of seeds, roots, and rhizomes prior to being moved off site.
- In off-ROW Project areas, such as storage yards, the Project EI would ensure that prescribed vehicle-cleaning measures would be undertaken to prevent the transportation of noxious and invasive weed propagules from these areas onto the ROW.
- Vehicle cabs would initially be swept out and refuse should be disposed of in waste receptacles. The contractor, with oversight from the Project EI, would ensure that vehicles and equipment are free of soil and debris capable of transporting noxious weed seeds, roots, or rhizomes before the vehicles and equipment are allowed to use Project access roads or enter the ROW.

7 TREATMENT METHODS

If necessary, noxious weed control measures would be implemented in accordance with existing regulations and jurisdictional agency or landowner agreements. Hiland would focus control efforts on areas with designated noxious weed species unless other agreements have been made with jurisdictional agencies or landowners. Special attention would be given to weed species that are

considered to be higher priority for control. Hiland would coordinate with appropriate agencies/entities to determine which of the species would require treatment and to determine appropriate treatment schedules. Hiland will adhere to EPA and TDA herbicide requirements.

Hiland would consult with appropriate agencies/entities in situations where herbicide treatment may not be an effective control treatment and would obtain concurrence before deciding to forego herbicide treatment of widespread noxious weed species. At a minimum, the treatment measures outlined below would be implemented to minimize the spread of noxious weeds.

7.1 General Treatment Methods

Within approved Project areas, noxious weed control during construction phases would be carried out primarily by using herbicide treatment methods. Herbicide treatment would consist of spot application or broad area application, as appropriate, to identified noxious weed infestations along the Project ROW and associated workspaces. Although herbicide application would be the primary method of weed control during the Project construction phase, other methods could also be implemented, as appropriate. Hiland may utilize one or more of the following treatment methods:

- Mechanical methods – Equipment would be used to mow or disk weed populations. Mowing or disking of weeds would occur prior to seed head development. Subsequent seeding with a suitable restoration seed mixture would be conducted as soon as possible following soil disturbance to re-establish a stabilizing suitable vegetation cover and to slow the potential reinvasion of the site by noxious weeds.
- Herbicide application – Herbicide application would be used to remove, reduce, or contain noxious weed populations. Applications would be controlled to minimize or avoid impacts on surrounding native vegetation. In areas of dense infestation where native species make up a very low percentage of total presence or in areas where impacts on native species would be very difficult to avoid even with spot applications, a broader application method may be used and a follow-up seeding program implemented. Supplemental seeding would be based on criteria from NRCS coordination.
- Manual methods – If mechanical or herbicide methods are not applicable based on site size or conditions, then weeds, including root structures, will be pulled by hand.

Treatment methods would be species-specific and based on area-specific conditions (e.g., proximity to waterbodies, time of year, etc.).

Only herbicides approved by the relevant agencies (federal, state, and local) or landowners would be used. Herbicides would be applied and stored according to the manufacturer's label with regard to weather and other environmental factors. If weeds targeted for herbicide treatment are found in the vicinity of sensitive biological resources, proper buffers would be used to prevent the spread of herbicides to these areas.

7.2 Treatment Schedule

Foliar-applied, translocated herbicides work best when sprayed on weeds that are actively growing, are not water stressed, and are not growing slowly due to cold temperatures or stressed due to extreme temperatures. A rain-free period of six hours is needed after application to avoid washing herbicides off treated leaves.

Most perennial and biennial species are best controlled by applying herbicide treatments twice per year: once in the fall (mid- to late-September in North Dakota) and again in early spring (early- to late-May in North Dakota). Fall treatments need to be timed so that green/living leaf and stem growth is still present but after hot summer temperatures have passed.

For noxious weeds identified along the Project ROW and TWS areas, initial herbicide spraying would occur prior to construction-related ground disturbance, followed by additional applications later in the season, as needed. Following restoration and revegetation activities, post-construction treatments would occur up to twice a year: once in spring and once in the fall. Actual frequency of treatments would be based on need, as determined through restoration monitoring and agency input.

7.3 Treatment Approach during Restoration and Revegetation

A successful restoration and revegetation program would be a vital component of the Project's overall weed control program. Mechanical, manual, and revegetation methods would be given greater consideration than the application of herbicides during the restoration and revegetation processes. While herbicide application may be successful at controlling noxious weeds, broad application and even spot application may hamper the re-establishment of native species during restoration efforts. For this reason, restoration and revegetation (through clearing, preparing seedbeds, and seeding native species) of areas containing broadly occurring weed species is the preferred post-construction method of weed control. However, should weather or scheduling constraints prevent timely restoration of disturbed areas, undesirable vegetation that has become established would be eradicated before re-seeding with native species.

The success of the revegetation effort would be enhanced by the selection/development of suitable seed mixtures based on site-specific conditions. Hiland will obtain approval for seed mixtures from the appropriate agencies or landowners before their use. Once established, native vegetation has the potential to out-compete some noxious weed species. The Project will follow restoration and revegetation measures from NRCS coordination.

Herbicide application may still be utilized as a weed control tool after reseeding with native plant species and other restoration activities have occurred. In most cases, Hiland would wait until after seedings in restoration areas have become established or until restoration plantings have been in place for one full growing season to apply broad herbicide treatments to weed-infested areas.

8 POST-CONSTRUCTION MONITORING

Noxious weed monitoring would be conducted during restoration and revegetation monitoring and would begin during the first growing season following the completion of construction and would continue for approximately 2 years concurrently with other annual monitoring efforts. Noxious weed monitoring would ensure that existing weed populations are not spreading to new areas and that restored areas are progressing toward the long-term goal of appropriate vegetative cover and diversity. While the primary goal would be to eradicate noxious weed populations within Project areas, a secondary, and likely more realistic goal, would be to prevent the introduction of new weed populations and the spread of existing populations (i.e., containment).

The following types of sites would undergo post-construction noxious weed monitoring:

- high-density noxious weed sites identified during the construction period,
- new high-density noxious weed populations detected through opportunistic sightings during the post-construction period, and
- equipment cleaning station locations established during Project construction.

Monitoring data would be used to assess post-construction treatments of noxious weed populations. Qualitative data would be collected during monitoring, and qualitative criteria would be analyzed when determining the success or failure of the Project weed management program at individual sites. If weed management success criteria (no re-establishment of noxious weeds in the Project area excluding activities not related to the project) have not been met at individual sites within 2 years, the program would be extended, as needed. In this case, the Project would seek further guidance from appropriate agencies in analyzing the Project weed management program and exploring feasible treatment options.

If significant new or reoccurring infestations are noted during the post-construction phase of the Project, treatment would be implemented, and the frequency of monitoring may be increased.

9 HERBICIDE APPLICATION, HANDLING, SPILLS, AND CLEANUP

9.1 Herbicide Application and Handling

Herbicide application would be conducted according to EPA standards and information gathered from the appropriate agencies with jurisdiction along the proposed Project route. Prior to applying herbicides, Project weed management contractors would obtain required federal, state, or local permits. Only licensed contractors would perform the herbicide applications, and then only in accordance with applicable laws and regulations. No treatment would occur without prior coordination with, and concurrence of, jurisdictional agencies or landowners.

Herbicide applications would follow EPA label instructions. Occupational Safety and Health Administration requirements would be followed when applying herbicides. Application of herbicides would be suspended if the following conditions occur:

- wind velocities exceed six miles per hour during application of liquids or 15 miles per hour during application of granular herbicides,
- snow or ice covers the foliage of noxious weeds, or
- precipitation is occurring or is imminent.

Vehicle-mounted sprayers (e.g., handgun, boom, and injector) would be used primarily in open areas that are readily accessible by vehicle. Hand-application methods (e.g., backpack spraying) that target individual plants would be used to treat small or scattered weed populations in rough terrain. Equipment would be calibrated at the beginning of spraying and periodically thereafter to ensure that proper application rates were achieved.

Herbicides would be transported to the Project site daily with the following provisions:

- Only the quantity needed for that day's work would be transported.
- Herbicide concentrate would be transported only in approved containers (as instructed by the manufacturer) in a manner that would prevent tipping or spilling, and in a compartment isolated from food, clothing, and safety equipment.
- Mixing would be done off site and at a distance greater than 500 feet from open or flowing water or other sensitive resources.
- No herbicides would be applied to open or flowing water or other sensitive resources unless authorized by appropriate regulatory agencies.
- Herbicide equipment and containers would be inspected for leaks daily.

9.2 Herbicide Spills and Cleanup

Reasonable precautions would be taken to avoid herbicide spills. In the event of a spill, cleanup would occur immediately. Contractors will be provided with a list of local approved disposal sites for use during response to herbicide spills and the Project-specific Spill Prevention, Control, and Countermeasure Plan (SPCC Plan). Herbicide contractors would obtain and have readily available copies of the appropriate Material Safety Data Sheets for the herbicides used. Herbicide spills would be reported in accordance with applicable laws and requirements. Contractors would keep spill kits in their vehicles and in herbicide storage areas to allow for quick and effective response to spills. Items to be included in the spill kit include the following:

- Protective clothing, eyewear, and gloves
- Adsorptive clay or other commercial adsorbent
- Plastic bags and bucket
- Shovel
- Fiber brush and screw-in handle
- Dust pan
- Caution tape

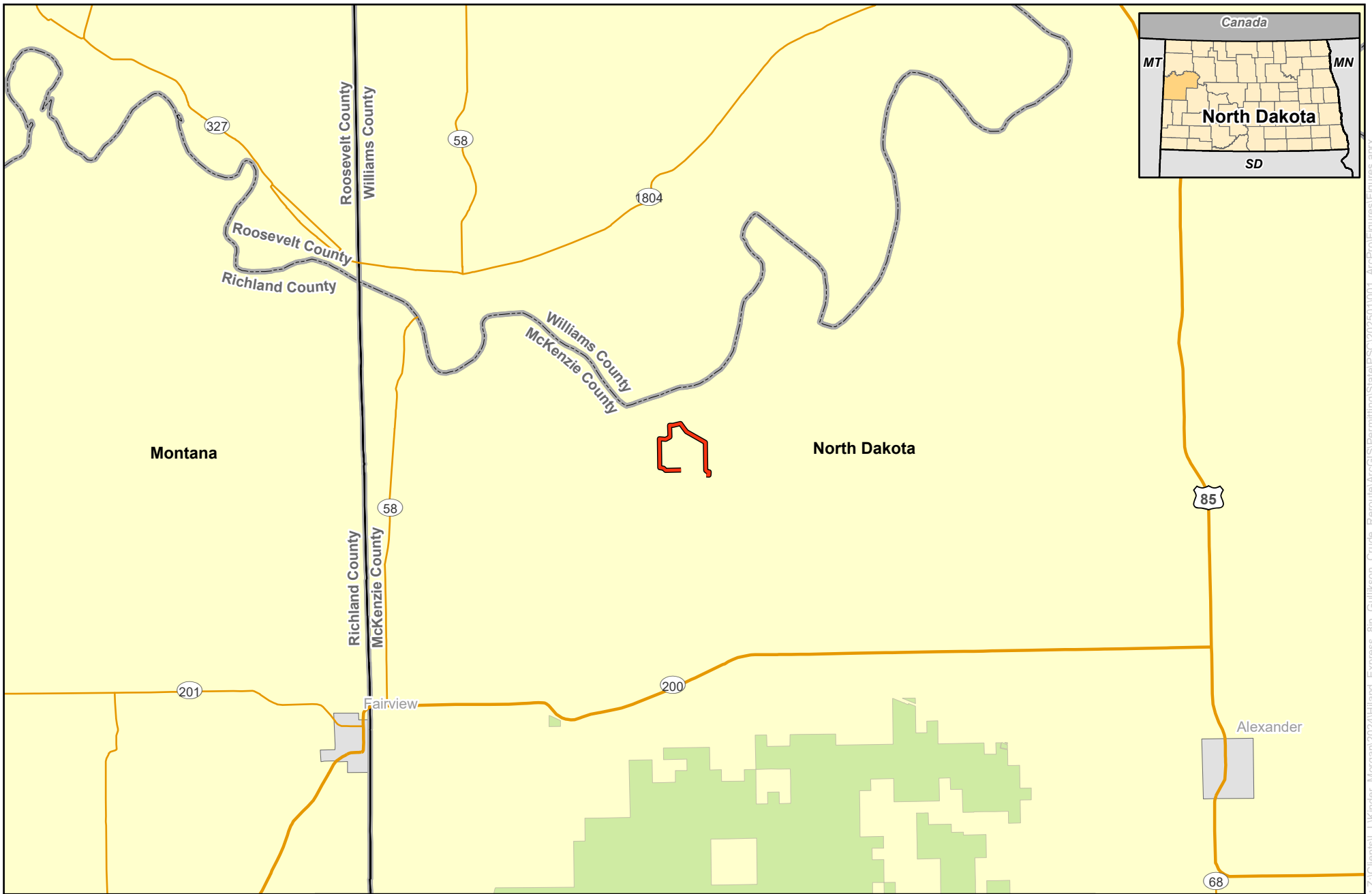
- Highway flares (use on established roads only)
- Detergent

Response to an herbicide spill would vary with the size and location of the spill, but general procedures would include the following:

- Controlling traffic
- Dressing the clean-up team in protective clothing
- Stopping the leaks
- Containing the spilled material
- Cleaning up and removing the spilled herbicide and contaminated adsorptive material and soil
- Transporting the spilled pesticide and contaminated material to an authorized disposal site

10 REFERENCES

- Bureau of Land Management (BLM). 2023. About Weeds and Invasive Species. Available at: <https://www.blm.gov/programs/weeds-and-invasives/about>. Accessed January 2025.
- Federal Register. 1999. Vol. 64. No. 25. Presidential Documents. Executive Order 13112: Invasive Species. Available at: <https://www.federalregister.gov/documents/1999/02/08/99-3184/invasive-species>. Accessed January 2025.
- North Dakota Legislative Council and North Dakota Department of Agriculture (NDDA). 2021. North Dakota Century Code Chapter 4.1-47 Noxious and Invasive Plant List amended to be effective May 2021. Available at: <https://www.ndda.nd.gov/sites/www/files/documents/files/2021%20Noxious%20Weeds%20Book.pdf>. Accessed January 2025.
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2022. Revegetation Guidelines: Considering Invasive and Noxious Weeds. Available at: <https://www.nrcs.usda.gov/plantmaterials/mtpmcpu13977.pdf>. Accessed January 2025.
- USDA. 2024. Animal and Plant Health Inspection Service (APHIS). Noxious Weeds Program Home Page. Available at: https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-and-disease-programs/pests-and-diseases/sa_weeds/sa_noxious_weeds_program. Accessed January 2025.



0 1.5 3 Miles
1:180,000

merjent.
For Environmental Review Purposes Only

Exhibit B.1 Hiland Crude, LLC Gullickson Reroute Pipeline Project Overview

- Proposed Pipeline
- Forest Service Land (USFS)



Hiland Crude, LLC
a Kinder Morgan company

Hiland Crude, LLC
a subsidiary of Kinder Morgan

Gullickson Reroute
Pipeline Project
McKenzie County, North Dakota

Spill Prevention, Control, and Countermeasure Plan

January 2025

CONTENTS

1	Introduction	1
	1.1 Project Overview	1
	1.2 Plan Overview.....	1
2	Prevention Measures.....	2
3	Spill Response	2
4	Reporting Procedures	3

ABBREVIATIONS AND ACRONYMS

C.F.R.	Code of Federal Regulations
EIT	Environmental Inspection Team
Hiland	Hiland Crude, LLC
FERC	Federal Energy Regulatory Commission
MAOP	Maximum Allowable Operating Pressure
MSDS	Material Safety Data Sheets
O.D.	outside diameter
Project	Gullikson Reroute Pipeline Project
PST	petroleum storage tank
ROW	right-of-way
RQ	Reportable Quantity
SPCC	Spill Prevention, Control, and Countermeasure Plan

1 INTRODUCTION

1.1 Project Overview

Hiland Crude, LLC (Hiland), a subsidiary of Kinder Morgan, owns and operates crude oil gathering and pipeline facilities in the state of North Dakota. Hiland is proposing to construct and operate the Gullickson Reroute Pipeline Project (Project) approximately 3.4 miles of eight-inch steel crude oil pipeline in McKenzie County located to the west of Watford City. Apart from inspection tool (pig) launchers and receivers, no above ground appurtenances are planned. This pipeline section will connect two existing eight-inch crude oil transportation pipelines as part of Hiland Crude's Market Center System.

Location and Description of Facilities

The proposed Project activities analyzed within this plan specifically include the following:

- Installation of approximately 3.4 miles of eight-inch steel pipeline
- Installation of pig launcher/receivers at both ends of the Project
- Wetlands or waterbodies will be open cut or Horizontally Directionally Drilled (HDD)
- The pipeline will be hydrotested
- Trench dewatering may be necessary
- Tree/brush clearing along new ROW pipeline system, laydown/storage areas, and access roads may be necessary, and Hiland will replant according to the North Dakota Public Service Commission (PSC) requirements.

Hiland has designed the scope of work for this Project in a manner that minimizes impacts on landowners and the environment. To the extent possible, Hiland has collocated the proposed Project facilities with existing Hiland facilities and other infrastructure. Hiland proposes to begin construction of the Project facilities in summer 2025 after receipt of all required federal, state, and local permits and authorizations in order to place the facilities in service by August 2025.

1.2 Plan Overview

This Spill Prevention, Control, and Countermeasure (SPCC) Plan describes measures that the Project contractor(s) would implement to prevent, control, and minimize impacts from a spill of fuels or other hazardous substances during construction of the Project. The goal of the SPCC Plan is to minimize the potential for a spill of these substances, to contain any spills to the smallest area possible, and to protect the environment, including areas considered environmentally sensitive. The SPCC Plan specifies spill prevention measures, spill response activities, and spill reporting and notification procedures.

All Project construction work will implement the SPCC Plan measures and procedures. This SPCC Plan does not certify the contractor or other individuals to become licensed waste haulers.

2 PREVENTION MEASURES

The contractor(s) will ensure that all practicable measures are taken to minimize the potential for and consequences of a spill during construction of the Project. The contractor(s) is responsible for complying with applicable environmental and safety laws and regulations, for training construction personnel, and for providing equipment designed to prevent pollution.

The proper use of materials and equipment greatly reduces the potential of contamination. The following is a list of general preventive practices to be implemented during construction of the Project.

- The contractor(s) must supply each construction crew with spill kits containing a sufficient quantity of absorbent and barrier materials to adequately contain and recover potential spills of fuels or lubricating oils. These kits may include, but are not limited to, drip pans, buckets, absorbent pads, straw bales, absorbent clay, sawdust, floor-drying agents, spill containment barriers, heavy plastic sheeting, plastic bags, shovels, and sealable containers. These materials must be readily accessible during all construction activities.
- The contractor(s) will train all personnel who handle fuels and other regulated substances to follow spill prevention procedures and to quickly and effectively contain and clean up spills.
- Fuels and lubricating oils for vehicles or heavy equipment will not be stored within 100 feet of dry washes, streams, or wetlands.
- Refueling of construction equipment will not occur within 100 feet of dry washes, streams, or wetlands.
- Authorized personnel shall only dispense fuels during daylight hours. Fuel dispensing operations may not be left unattended.
- On-site vehicles will be monitored for leaks and will receive regular maintenance to reduce the chance of leaks. Vehicle maintenance wastes, including used oils and other fluids, will be handled and managed by personnel trained in the procedures outlined in this plan.
- Storage containers will display labels that identify the contents of the container and whether the contents are hazardous. The contractor shall maintain and provide, on demand, copies of all Material Safety Data Sheets (MSDS).
- Site foremen and construction personnel who will be working with hazardous or regulated substances will be trained in the requirements of this plan prior to participation in site work.

3 SPILL RESPONSE

Immediately upon learning of the spill of any fuel, oil, hazardous substance, or other regulated substance, the contractor(s) will undertake the following activities.

- Identify the source of a spill and take all necessary measures to prevent further material from being spilled.

- Remove all potential ignition sources if the spilled material is combustible or flammable if it is safe to do so.
- Notify the contractor's spill coordinator. The contractor's spill coordinator will notify the Project Environmental Inspection Team (EIT).
- Assess the situation and determine subsequent clean-up activities and responsibilities.
- If the spill is beyond the response ability of on-site equipment and personnel, immediately notify the Project EIT that an emergency response contractor is needed.

For spills that occur on land, earthen berms will be constructed with available equipment to physically contain spills, if appropriate. Absorbent materials will also be applied to soak up spilled material, and traffic will be minimized on contaminated soils.

In the unlikely event that spills occur near or into a stream, wetland, or other waterbody, regardless of size, the following conditions shall apply in addition to the measures described above.

- For spills in standing water, floating booms, skimmer pumps, and holding tanks will be used as appropriate to recover and contain released materials on the surface of the water.
- For a spill threatening a waterbody, berms and/or trenches will be constructed to contain the spill prior to its entry into the waterbody. Deployment of booms, skimmers, and sorbent may be necessary if the spill reaches the water.
- Spilled material will be immediately and completely contained and cleaned up if it is safe to do so. The material manufacturer's methods for spill cleanup will be followed as described on the material MSDS.

All contaminated soils, vegetation, absorbent materials, and other contaminated wastes shall be handled, contained, and disposed of by the contractor(s) in accordance with applicable local, state, and federal regulations.

4 REPORTING PROCEDURES

The contractor(s) is required to report all spills of hazardous substances, regardless of size or location, to the Project EIT. The contractor(s) is also required to notify the Project EIT of any of the following hazardous conditions.

- "Hazardous substance" means any substance or mixture that presents a danger to the public health or safety, including but not limited to a substance that is: toxic, corrosive, or flammable; that is an irritant; or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances that, in sufficient quantity, may be hazardous: acids; explosives; fertilizers; heavy metals, such as chromium, arsenic, mercury, lead, or cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents.
- "Hazardous condition" means any situation involving the actual, imminent, or probable spill, leak, or release of a hazardous substance onto the land or into the atmosphere that,

because of its quantity, strength, toxicity, mobility in the environment, or its persistence, creates an immediate or potential danger to the public health or safety or to the environment.

Depending on the material spilled and the quantity and location of the spill, notification of appropriate federal and/or state emergency response entities may be required. Hiland's Environmental Project Manager or EIT shall report any hazardous substance spill or hazardous condition to the National Response Center, which is the sole federal point of contact for reporting oil and chemical spills and the North Dakota Department of Emergency Services if:

- A hazardous substance has the potential to leave the property by flowing over the surface or through sewers, tile lines, culverts, drains, utility lines, or other conduit.
- A hazardous substance has the potential to reach any surface water or groundwater.
- Any hazardous substance has spilled directly into a water of the state.
- A hazardous substance is detected in the air at the boundaries of the construction activities by the senses (sight and smell) or by monitoring equipment.
- There is a hazardous condition that poses a potential threat to the public health and safety.

No thresholds have been established for reportable spills.

The appropriate federal and state contacts for the Project are as follows:

Federal Contact	Federal Contact National Response Center (Washington, D.C.) Phone: (800) 424-8802 (24 Hours)
North Dakota Contacts	North Dakota Department of Emergency Services Phone: 1-833-99SPILL North Dakota Department of Environmental Quality Phone: (701) 328-5210 North Dakota Oil and Gas Division Phone: (710) 328-8020



Hiland Crude, LLC
a Kinder Morgan company

Hiland Crude, LLC
a subsidiary of Kinder Morgan

Gullickson Reroute
Pipeline Project
McKenzie County, North Dakota

Unanticipated Discoveries Plan

January 2025

CONTENTS

Section 1: Introduction 1

Section 2: Training..... 2

Section 3: Unanticipated Cultural Resource Discovery Procedure 3

 3.1 Definition of an Unanticipated Cultural Resources Discovery..... 3

 3.2 Procedure for Addressing Discoveries Identified by Construction Personnel
 3

 3.3 Procedure for Treatment of Discoveries by Professional Archaeologist 3

 3.4 Special Procedures for Discoveries of Human Remains 4

Section 4: State Historical Society Coordination and Reporting..... 6

Table 1: Project and Agency Contact Information 5

SECTION 1: INTRODUCTION

This Unanticipated Discovery and Monitoring Plan (Plan) presents procedures to be implemented in the event potential cultural resources are discovered during construction of the Hiland Crude, LLC (Hiland) Gullickson Reroute Pipeline Project (Project) that is located in McKenzie County, North Dakota

Significant historical or archaeological artifacts or sites under the jurisdiction of the State of North Dakota or its political subdivisions are protected under Section 55-02-07 of the North Dakota Century Code (NDCC). Furthermore, NDCC Section 23-06-27 and North Dakota Administrative Code (NDAC) Section 40-02-03 provide special protection of human burial sites, human remains and burial goods. This Plan presents procedures for addressing potential cultural resource discoveries identified during the construction of the Project, including procedures for the initial treatment of discoveries, the evaluation and treatment of discoveries, and the treatment of human remains.

SECTION 2: TRAINING

Training is necessary in order for construction personnel to recognize potential archaeological resources. All construction personnel will meet with Hiland representatives for basic training prior to participating in construction. This training will provide orientation regarding recognition of cultural resources as well as a general overview of the culture history of the region so construction personnel are familiar with the types of archaeological resources that may be encountered during construction. The training will also outline the steps to be followed in the event of a potentially significant archaeological discovery during construction (e.g., the discovery of human remains). The following items will be reviewed within the program:

- Definition of a discovery and examples of discoveries;
- Steps towards discovery protection until such time as they can be properly evaluated by a qualified archaeologist;
- Proper notification of the appropriate Hiland personnel;
- Necessity of reporting discoveries in a timely manner and complying with the other stipulations provided in this plan;
- Need to treat any human skeletal remains that are encountered with dignity and respect; and
- Penalties for failure to report discoveries or to comply with the procedures outlined in this Plan.

SECTION 3: UNANTICIPATED CULTURAL RESOURCE DISCOVERY PROCEDURE

3.1 Definition of an Unanticipated Cultural Resources Discovery

Cultural resource discoveries consist of evidence of human activity, more than 50 years old, with potential to yield data pertinent to regional history and prehistory. Prehistoric discoveries include, but are not limited to, features (small hearth features, housepit features, storage features, etc.), artifact concentrations (points), and activity areas. Historic discoveries include, but are not limited to, features (historic hearths, foundations, structures, old canals, roads, etc.), artifact concentrations (glass or pottery shards, trash deposits, abandoned equipment) and activity areas. Isolated historic artifacts or small concentrations of non-human bone will not be considered discoveries.

3.2 Procedure for Addressing Discoveries Identified by Construction Personnel

The following procedures will be initiated in the event unanticipated potential cultural resources are discovered.

- Construction activity that resulted in the exposure of the discovery will be **immediately** halted.
- The Construction Manager will be notified.
- A buffered area will be set up around the discovery. A minimum 50-foot (15 m) perimeter is recommended. Visual barriers such as temporary fencing are recommended. No ground disturbing activities, including vehicle traffic, are allowed within the area until the proper cultural resource evaluation has been completed.
- Hiland will notify and consult a professional archaeologist to review the discovery.

During the review phase, suspension of all work and vehicle traffic in the buffered area is required. If the archaeologist determines that the discovery is non-cultural, Hiland will be notified, and the halted construction activity can resume.

- If the discovery is deemed cultural and a field visit is required, no ground disturbing activities are allowed within the buffered discovery area until the field visit by the archaeologist occurs. During the field visit, the archaeologist will determine whether the discovery is potentially significant.

3.3 Procedure for Treatment of Discoveries by Professional Archaeologist

An archaeologist will review and fully record a discovery according to approved standards. The initial treatment of any discovery will consist of recording the location of the discovery; recording summary data concerning the feature(s) and/or other remains (including dimensions, qualitative characteristics, and associated remains);

photographing the discovery and the overall context of the exposed material; and profiling trench walls containing cultural features or strata (where safe and prudent). The feature(s) will then be excavated, and a sample will be collected for laboratory analysis as appropriate. Feature plans and profiles will be drawn. Features will be photographed. Uncollected feature fill will be screened using 0.25-inch mesh. If necessary, additional horizontal exposure of sediments/deposits around the feature may be investigated to evaluate the feature context.

When appropriate, the location around the discovered cultural material will be tested to determine the extent of the cultural material. Testing can include, but is not limited to, excavation of controlled units over and around the feature area or placement of test units and/or auger probes. Testing will be designed to identify the nature and extent of the discovery and any associated activity area(s) or other features, if present.

3.4 Special Procedures for Discoveries of Human Remains

Should human remains be encountered during construction of the Project, per the protocol outlined above, all work will be immediately halted at the general location of the discovery. The location will be immediately secured, including a buffer zone of 100 feet (30 m) surrounding the discovery. Construction personnel and vehicles will promptly vacate the buffer zone. Vehicle traffic within the buffer zone will be limited to that necessary to remove other vehicles and equipment from the buffer zone. Care will be taken to prevent any disturbance of the potential human remains during removal of vehicles and equipment. Until appropriate consultation has occurred, the discovery shall remain protected from any disturbance, such that no remains or associated artifacts are touched, moved or collected.

Following notification of the Construction Manager and the Hiland Project Manager, Hiland will immediately notify local law enforcement and the county coroner (see Table 1).

Table 1: Project and Agency Contact Information

CONTACT	NAME	PHONE NUMBER
Hiland Construction Manager	Fred Silva III	M: 903-219-0665
Hiland Project Manager	Eric Jensen	O: 918-588-5060 M: 918-998-8881
Environmental Representative (on-site)	TBD	M:
McKenzie County Sherriff	Gary Schwartzenberger	701-444-3654
McKenzie County Coroner	McKenzie County Medical Examiner & Coroner	701-770-4522
North Dakota State Historic Preservation Office	Paul Picha (Chief Archaeologist)	701-328-3574

SECTION 4: STATE HISTORICAL SOCIETY COORDINATION AND REPORTING

If the discovery is deemed potentially significant, Hiland and the archaeologist will consult and coordinate with the State Historical Society to propose procedures for further treatment of the discovery while minimizing impacts to the construction schedule to the extent possible. Suspended construction activities in the discovery area may not proceed until approval has been obtained from the State Historical Society and other involved agencies and parties.

A report detailing all cultural resources identified, recorded, tested and/or excavated during the construction phase of the Project, regardless of significance, will be prepared by the archaeologist and submitted to the State Historical Society for review within six months of project completion.