Resource Report 2
Water Use and Quality

Resource Report No. 2

Water Use and Quality

Central Mainline Corridor Expansion Project

FERC Docket No. CP26-___-000

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RESOURCE REPORT 2 – WATER USE AND QUALITY
SUMMARY OF FILING INFORMATION

MINIMUM REQUIREMENT	LOCATION ADDRESSED
Identify all perennial surface waterbodies crossed by the proposed projects and their water quality classification. (18 CFR § 380.12(d)(1)) • Identify by milepost • Indicate if potable water intakes are within 3 miles downstream of the crossing.	Sections 2.2, 2.2.9, 2.2.12 and Table 2.2-2
Identify all waterbody crossings that may have contaminated waters or sediments. • Identify by milepost • Include offshore sediments.	Sections 2.2.1 and 2.2.4
Identify watershed areas, designated surface water protection areas, and sensitive waterbodies crossed by the proposed projects. (§ 380.12(d)(1)) • Identify by milepost	Sections 2.2.2, 2.2.3, 2.2.4, 2.2.5, 2.2.6, 2.2.7, 2.2.8, 2.2.9, 2.2.12 and Table 2.2-3
Provide a table based on National Wetlands Inventory (NWI) maps (if delineations have not been done) identifying all wetlands, by milepost and length, crossed by the proposed project (including abandoned pipeline), and the total acreage and acreage of each wetland type that would be affected by construction. (§ 380.12(d)(1) and (4))	Table 2.3-1
Discuss construction and restoration methods proposed for crossing wetlands and compare them to staff's Wetland and Waterbody Construction and Mitigation Procedures. (§ 380.12(d)(2))	Sections 2.3.1 and 2.3.2 and Table 2.3-1
Describe the proposed waterbody construction, impact mitigation, and restoration methods to be used to cross surface waters and compare to the staff's Wetland and Waterbody Construction and Mitigation Procedures. (§ 380.12(d)(2)) • Although the Procedures do not apply offshore, the first part of this requirement does apply. Include effects of sedimentation, etc. Information is needed on a mile-by-mile basis and will require completion of geophysical and other surveys before filing. (See also, Resource Report 3.)	Section 2.2.14 Table 2.2-2, Resource Report 1, Section 1.3.4
Provide original NWI maps or the appropriate state wetland maps, if NWI maps are not available, that show all proposed facilities and include milepost locations for proposed pipeline routes. (§ 380.12(d)(4))	Figure 2-1
Identify all U.S. Environmental Protection Agency (EPA) - or state-designated aquifers crossed. (§ 380.12(d)(9)) • Identify the location of known public and private groundwater supply wells or springs within 150 feet of construction.	Sections 2.1, 2.1.1, 2.1.2 and Table 2.1-1
ADDITIONAL INFORMATION	
Identify proposed mitigation for impacts on groundwater resources.	Sections 2.1 and 2.1.5
Discuss the potential for blasting to affect water wells, springs, and wetlands, and associated mitigation.	Sections 2.1.1 and 2.1.5
Identify all sources of hydrostatic test water, the quantity of water required, methods for withdrawal, and treatment of discharge, and any waste products generated.	Section 2.2.11 and 2.2.14
If underground storage of natural gas is proposed, identify how water produced from the storage field will be disposed.	Not applicable
If salt caverns are proposed for storage of natural gas, identify the source locations, the quantity required, the method and rate of water withdrawal, and disposal methods.	Not applicable
For each waterbody greater than 100 feet wide, provide site-specific construction mitigation and restoration plans.	Sections 2.2 and 2.2.14
Indicate mitigation measures to be undertaken to ensure that public or private water supplies are returned to their former capacity in the event of damage resulting from construction.	Sections 2.1.1, 2.1.2 and 2.1.5
Describe typical staging area requirements at waterbody and wetland crossings.	Section 2.2.14 and 2.3.2
If wetlands would be filled or permanently lost, describe proposed measures to compensate for permanent wetland losses.	Not applicable
If forested wetlands would be affected, describe proposed measures to restore forested wetlands following construction.	Not applicable
Describe techniques to be used to minimize turbidity and sedimentation impacts associated with offshore trenching, if any.	Not applicable

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Abbreviations and Acronyms

BMP	Best management practice
CFR	Code of Federal Regulations
CWA	Clean Water Act
EI	Environmental Inspector
EPA	Environmental Protection Agency
ESB	Environmental survey boundary
ETWS	Extra temporary workspace
FERC	Federal Energy Regulatory Commission
FEMA	Federal Emergency Management Agency
FRS	Facility Registry System
GWR	groundwater well registration
HDD	Horizontal directional drill
IDNR	Iowa Department of Natural Resources
IM	Interactive Map
IGS	Iowa Geological Survey
IWIS	Iowa Well Information System
JD	jurisdictional determination
MP	milepost
NDEQ	Nebraska surface water quality standards
NDWEE	Nebraska Department of Water, Energy and Environment
NGPC	Nebraska Games and Parks Commission
NHD	National Hydrography Dataset
NHP	Natural Heritage Program
Northern	Northern Natural Gas
NPPD	Nebraska Public Power District
NRCS	Natural Resources Conservation Service
NRD	Natural Resource District
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OWT	onsite wastewater treatments
PCN	Pre-construction notification
Plan	FERC's Upland Erosion Control, Revegetation and Maintenance Plan
Procedures	Northern's Wetland and Waterbody Construction and Mitigation Procedures
Project	Central Mainline Corridor Expansion Project
RCRA	Resource Conservation and Recovery Act
ROW	Right-of-way
SDWA	Safe Drinking Water Act
SFHA	Special Flood Hazard Areas
SPCC	Spill Prevention, Control and Countermeasure
SWAP	Source Water Assessment Program
SWCD	Soil and Water Conservation District

SWPPP	Storm Water Pollution and Prevention Plan
TAR	Temporary Access Road
TBS	town border station
TCSB	temporary clear span bridge
TMDL	Total maximum daily load
TWS	Temporary Workspace
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
UST	underground storage tank
WMA	Watershed Management Authority
WHPA	Wellhead Protection Area
WOTUS	Water of the United States

2.0 WATER USE AND QUALITY

Resource Report 2 describes the water resource setting for Northern's proposed Project. The report details groundwater, surface water and wetland resources. An assessment of the potential for impacts and mitigation measures associated with construction and operation of the Project is discussed.

Northern owns and operates a natural gas transmission pipeline system and associated aboveground facilities, including pipelines and facilities in Iowa and Nebraska. Northern is proposing to construct the Project, which will consist of (1) install 9.03 miles of 20-inch-diameter Omaha 3rd branch line loop, (2) install 14.64 miles of 30-inch-diameter Nebraska Public Power District Princeton Road power station branch line, (3) install 2.48 miles extension of the 20-inch-diameter Des Moines C-line, (4) uprate of the 20-inch-diameter Des Moines C-line south loop, (5) install new compressor station near Clarion, Iowa, (6) modify five compressor stations in Iowa and Nebraska allowing bidirectional flow, (7) install Nebraska Public Power District Princeton Road power station meter station, (8) install aboveground facilities including a launcher, receiver, tie-in valve settings and uprate ancillary equipment. All Project components are located in various counties in Nebraska and Iowa.

Table 2.0-1 Project Facilities and Location

Component	Project Facility	Facility Description	County, State
Omaha 3rd branch line loop	9.03-mile pipeline	20-inch-diameter loop	Cass and Sarpy, NE
	Palmyra compressor station	Temporary compression site	Otoe, NE
NPPD Princeton Road power station branch line	14.64-mile pipeline	30-inch-diameter branch line	Gage and Lancaster, NE
	Beatrice to Palmyra D-line and Beatrice to Palmyra E-line Block Valve 5 Setting	Temporary compression site	Lancaster, NE
Des Moines C-line branch line extension	2.48-mile pipeline	20-inch-diameter extension	Dallas, IA
	Ogden compressor station	Temporary compression site	Boone, IA
Des Moines C-line south loop uprate	Royal Estates reducing station	Disconnect existing MAOP control valve	Polk, IA
	Grimes Iowa TBS	New MAOP regulator	Polk, IA
	Des Moines A-line launcher	New control valve	Polk, IA
Clarion compressor station	Proposed compressor station	ISO-rated 20,500-HP	Wright, IA
Beatrice compressor station	Facility modification	New scrubber install	Gage, NE
Guthrie Center compressor	Facility modification	New piping and valves	Guthrie, IA
Oakland compressor station	Facility modification	New piping and valves	Pottawattamie, IA
Ogden compressor station	Facility modification	New piping and valves	Boone, IA

Component	Project Facility	Facility Description	County, State
Palmyra compressor station	Facility modification	New piping, valves and regulation	Otoe, NE

2.1 GROUNDWATER RESOURCES

Groundwater aquifers used for public and private water sources may be contained in unconsolidated depositional units or lithified bedrock units, depending on the location. Major glacial events and sedimentation processes have created areas with different aquifer properties throughout the Project.

As outlined by the USGS (USGS 2003), the portions of the NPPD Princeton Road power station branch line are underlain by the Great Plains Aquifer System. In eastern Nebraska, the Great Plains Aquifer System is comprised of the Dakota Sandstone (USGS 1997). The Great Plains Aquifer System also underlies portions of Kansas, Colorado, New Mexico, Wyoming, and South Dakota. Well-yields and groundwater quality within these aquifers are variable, where seasonal pumping can draw low-quality, saline water upward over time, and eventually may be unsuitable for drinking or irrigation (USGS 1997). The remainder of the Project pipelines are underlain by bedrock confining units (USGS 1992; USGS 1997).

All Project components are also underlain by the Surficial Aquifer System. The aquifer system primarily consists of materials deposited by multiple advances of continental glaciers. In Iowa and Nebraska, the glacial deposits are from older ice advances that are rich in clay and therefore have minimal permeability. Reworked coarse grained alluvial material along stream valleys and buried former stream valleys provide important surficial aquifers in these states (USGS 1992; USGS 1997).

As defined by the EPA, some aquifers may be termed “sole-source” if the aquifer supplies at least 50% of the drinking water for its service area, or if there are no reasonably available alternative drinking water sources should the aquifer become contaminated. This designation is formally dictated by the state primary agency. No EPA-designated sole-source aquifers are located beneath or within one mile of the proposed Project (EPA 2026a).

Karst features are not present on the Project with the exception of the northernmost 2.75 miles on the Omaha 3rd branch line loop associated with the Platte River crossing. This portion of the Omaha 3rd branch line loop is located in potential karst terrain with Pennsylvanian bedrock at depths of less and greater than 50 feet. Geotechnical borings encountered a combination of sandstone, shale, and limestone. The HDD will extend into the bedrock surface; Northern has completed a detailed feasibility report that includes further details. The feasibility report is included in the HDD Plan, Resource Report 1, Appendix 1A.

2.1.1 Public and Private Water Supply Wells

Public water supply wells are regulated by each state and their local health departments. Public water supply wells are registered, documented and monitored. In Nebraska, the GWR along with the Nebraska Registered Well Inventory are the most complete records of well construction and location information. The GWR and well index are updated and

maintained by the NDWEE. In Iowa, water supply wells are permitted through and regulated by the IDNR. Additionally, under the University of Iowa's IIHR—Hydroscience & Engineering Center, the IGS maintains records of private and public water wells in the state of Iowa, along with the IWIS, the IDNR Water Use Well database, respectively (UI IIHR—Hydroscience & Engineering Center 2021a).

The majority of the Project components are underlain by a thick layer of glacial drift, which significantly reduces the likelihood of the surface expression of karst bedrock features. With the exception of the northernmost 2.75 miles of the Omaha 3rd branch line loop, the USGS has identified no areas with carbonate bedrock that is underlain by less than 50 feet of unconsolidated material.

Geotechnical borings completed adjacent to the Platte River crossing indicate that the shallowest competent bedrock encountered was sandstone at a depth of approximately 72 feet below ground surface. Due to the depth required to complete the HDD underneath the Platte River, the HDD will be constructed within competent bedrock (sandstone, shale and limestone) at depths greater than 72 feet, thereby minimizing the potential for impacts to shallow groundwater resources.

Based on these conditions, Northern conducted a review of groundwater well information using the Nebraska GWR, the Nebraska Registered Well Inventory, and the IGS databases. This review evaluated known private and public groundwater supply wells located within 150 feet and 400 feet, respectively, of construction workspaces, as well as wells located within 1,000 feet of construction workspaces associated with the Platte River HDD crossing. This information is provided below in Table 2.1-1.

Table 2.1-1 Water Supply Wells Surrounding the Project[1]

MP	Supply Type	Well Use	Feet from Project Boundary and Direction	Feet from Center Line and Direction	Adjacent Pipeline Construction Method
Nebraska pipelines					
Omaha 3rd branch line loop					
8.8	Private	Irrigation	0, Southwest	8, Southwest	TWS
0.1	Private[2]	Domestic	143, East	265, East	OMA-ETW-001
8.7	Private[2]	Domestic	3, Northeast	1,337, East	OMA-TAR-010
8.6	Private[2]	Domestic	93, Southeast	1,666, East	OMA-TAR-010
8.7	Private[2]	Domestic	952, Northeast	2,645, East	OMA-TAR-010
8.6	Private[2]	Domestic	402, East	1,951, East	OMA-TAR-010
8.7	Private[2]	Domestic	855, Northeast	2,547, East	OMA-TAR-010
10.3	Private[2]	Domestic	574, East	2,139, East	OMA-TAR-010
8.8	Private[2]	Other (closed loop heat exchanger)	650, Northeast	685, Northeast	TWS
8.6	Private[2]	Domestic	208, East	341, East	OMA-ETWS-050
No public wells present within 400 feet of workspace or within 1,000 feet of HDD underneath Platte River.					
NPPD Princeton Road power station branch line					
6.4	Private	Irrigation	85, Southwest	150, Southwest	TWS

MP	Supply Type	Well Use	Feet from Project Boundary and Direction	Feet from Center Line and Direction	Adjacent Pipeline Construction Method
1.8	Private	Domestic	49, Northeast	108, Southwest	PRB-ETWS-011
8.3	Private	Irrigation	17, Northeast	1,643, Northeast	PRB-TAR-005
No public wells present within 400 feet.					
Iowa Pipelines					
Des Moines C-line branch line extension					
No private wells present within 150 feet and no public wells present within 400 feet.					
Des Moines C-line south loop uprate					
No private wells present within 150 feet and no public wells present within 400 feet.					
Clarion compressor station					
N/A	Other	Gas Storage	0, North	N/A	CCS-ETWS-001
No public wells present within 400 feet.					
Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 setting					
No private wells present within 150 feet and no public wells present within 400 feet.					
Palmyra compressor station valve and pipe					
No private wells present within 150 feet and no public wells present within 400 feet.					
Guthrie Center compressor station valve and pipe					
No private wells present within 150 feet and no public wells present within 400 feet.					
Oakland compressor station valve and pipe					
N/A	Other	Inactive/Not Used	0, North	N/A	OAK-ETWS-001
Ogden compressor station valve and pipe					
No private wells present within 150 feet and no public wells present within 400 feet.					

Source: IGS, IWIS, GWR, Nebraska Well Index and owner contact
[1] No wells on the Project were field verified by civil survey
[2] Wells within 1,000 feet of workspace due to HDD underneath Platte River (karst geology)

No active public wells are located within 400 feet of Project workspaces or within 1,000 feet of the Platte River HDD crossing. One inactive public well registered to Northern is located within the Oakland compressor station footprint; therefore, the Project will have no impact on public wells.

A total of 14 active wells were identified within proximity to the Project. Seven private wells and one other (gas storage) well are located within 150 feet of Project workspaces. An additional six private wells are located between 150 feet and 1,000 feet of Project workspaces along the Omaha 3rd branch line loop where underlying karst formations occur. Mitigation measures and spill containment are discussed in Section 2.1.5.

2.1.2 Wellhead Protection Areas

Under the 1986 amendments to the SDWA, each state is required to develop and implement a Wellhead Protection Program in order to identify the land and recharge areas contributing to public supply wells, and to protect the recharge areas to prevent the contamination of drinking water supplies. The SDWA was updated in 1996 with an amendment requiring the development of a broader-based SWAP. In Nebraska, the NDWEE interactive map contains the location and details of all WHPAs in the state (NDWEE 2026). In Iowa, the

IDNR is responsible for administering Iowa's SWAP and for regulating water allocation and water use through the issuance of water use permits. The goal of Iowa's SWAP is "to manage the areas through which water travels and the activities that occur on the land, in order to protect the quality of the resource. These protection efforts save the community money through improved water quality requiring less treatment, longer life cycle for a well, and less likelihood of having to seek an alternate source or replace the well due to contamination" (IDNR 2021). In Iowa, source water protection is voluntary but the IDNR strongly encourages communities to develop a source water protection program to protect the water supply and proactively address existing concerns related to drinking water quality and quantity (IDNR 2021).

Upon review of the NDWEE and IDNR databases, three WHPAs are crossed by the Project. They are as follows:

- a WHPA associated with the Village of Louisville, within the Lower Platte South NRD, is crossed by the Omaha 3rd branch line loop between MP 7.70 and 7.87.
- A WHPA associated with the Village of Cortland, within the Lower Big Blue NRD, is crossed by the NPPD Princeton Road power station branch line between MP 7.09 and 8.03.
- A WHPA associated with Camp Oasis, within the Nemaha NRD, is partially located within TWS at MP 3.13 along the NPPD Princeton Road power station branch line.

No other source water protection areas are crossed by the Project in Nebraska or are within 400 feet of planned Project workspace areas or within 1,000 feet of the Platte River crossing (NDWEE 2026). Additionally, no Iowa Project components are within 400 feet of source water protection areas. The closest source water protection area to an Iowa Project component is the Grimes-Alluvial source water protection area approximately 0.55 mile southwest of the Grimes Iowa TBS (IDNR 2026a). Therefore, Northern has determined Iowa Project components will have no impact on to source water protection areas. Northern will coordinate with the applicable NRDs to comply with measures to protect against direct and indirect impacts to public water sources in Nebraska that are crossed by the Project. Agency coordination is provided in Appendix 2D. Mitigative actions are discussed in Section 2.1.5 below.

2.1.3 Springs

Springs are regulated in Nebraska by the NDWEE under Nebraska Ground Water Management and Protection Act, along with additional statutes in the Nebraska Legislature. The state of Nebraska does not maintain a publicly available inventory or database of spring locations, instead, the Nebraska NHP provides scientific information on the status and locations of springs and other natural communities in the state. Northern submitted environmental review requests to the NGPC and received responses on Project components in Nebraska February 25, 2025. The NGPC NHP did not identify any known springs within one mile of the Project area. In Iowa, springs are regulated by the IDNR.

No records of springs are known to occur within 150 feet of the Project in Iowa. Northern recognizes springs may be present that have not been documented in Nebraska or Iowa; however, field staff did not observe any springs/seeps within the Project ESB during field surveys and landowners have not provided any additional information regarding

springs/seeps. Northern will notify FERC and applicable agencies if any un-mapped springs are discovered during construction. Nebraska NHP correspondences are provided in Resource Report 3 Appendix 3B.

2.1.4 Potential Source of Groundwater Contamination

Northern completed a search of publicly available databases to identify various facilities with potential and/or actual sources of contamination within 500 feet of the Project construction workspaces that could impact nearby groundwater. The EPA's Facility Registry Service map service (EPA 2025) was queried and includes sites that are listed on the Comprehensive Environmental Response, Compensation, and Liability Information System (also known as Superfund sites); RCRA Treatment, Storage, and Disposal; RCRA hazardous waste generators; the Assessment, Cleanup, and Redevelopment Exchange System; and the Leaking Underground Storage Tank—American Recovery and Reinvestment Act database. In addition, the search was expanded by reviewing the NDWEE IM and IDNR IWIS-Map, which provides a comprehensive list of contaminated sites available for public view.

A review of the EPA FRS identified EPA-registered facilities associated with Northern's existing compressor stations (Palmyra, Beatrice, Oakland and Ogden) that will be used or modified during planned Project activities. Each compressor station is listed for NPDES and air permitting authorizations. No other EPA-registered facilities are located within 500 feet of the planned Project workspace. The IDNR IWIS map also identified one site contamination report associated with a former burn pit. Groundwater contamination at Oakland consists of concentrations of hydrocarbons and solvents below state action levels. The groundwater contamination is outside of the ETWS; no groundwater contamination is anticipated. Additionally, Northern has submitted a site closure request to IDNR regarding this area. No other sources of contamination were identified within 500 feet of workspaces associated with the Project, and no known Superfund sites are located within 500 feet of the Project.

A review of the NDWEE IM identified multiple rural residential onsite wastewater treatment systems (OWTs; i.e., septic systems) within 500 feet of the Project workspace. Additionally, septic tanks are located within each of Northern's existing facilities associated with the Project, however, they are not located in areas of proposed work. No other OWTs are located within Project workspace areas, and Northern does not anticipate impacts to OWTs that are not crossed by the Project. Northern will continue to coordinate with landowners to confirm the exact locations of OWTs to ensure avoidance or proper relocation prior to construction activities.

A search of the databases discussed above identified two USTs within 500 feet of the Omaha 3rd branch line loop. One UST is located approximately 335 feet south of OMA-TAR-001 and is associated with Westover Rock and Sand Inc., located along State Highway 50 in Cass County, Nebraska. The second UST is located approximately 427 feet north of OMA-ETWS-002 and is associated with the Hilltop Fill Stop, also located along State Highway 50 in Cass County, Nebraska. In Iowa, the IDNR IWIS map identified three USTs located within existing Northern facilities: one within the Ogden compressor station and two within the Oakland compressor station.

Northern is aware of documented USTs and contaminants at its existing facilities. However, proposed work at these locations will be primarily limited to aboveground modifications, with minimal subsurface disturbance anticipated. Northern will implement existing facility plans and its SPCC Plan to prevent contamination resulting from Project activities. Additionally, if any contaminated soil or groundwater is encountered during construction of the Project, contaminated materials will be sampled. On receipt of the laboratory analytical results, Northern will develop a site-specific contaminated soil and/or groundwater plan detailing how Northern proposes to handle and dispose of contaminated soil and/or water in accordance with applicable state regulations.

2.1.5 Groundwater Impact Mitigation

Long-term impacts on groundwater resources from the construction, operation and maintenance of the Project are not anticipated. The pipeline facilities will consist of new steel pipe that will be free of chemicals or lubricants, and no additives will be used.

Northern's construction standards are designed to minimize impacts on groundwater during construction. Northern will adhere to the SPCC plan included in Appendix 2A to minimize the potential for contamination of groundwater from construction equipment. Northern will implement BMPs and measures outlined in the Plan and its Procedures. Additionally, Northern will implement BMPs described in the Project-specific SWPPPs, included in Resource Report 7, Appendix 7D. Some of these BMPs are discussed below.

Mitigation for Private Wells

Activities such as equipment refueling and maintenance, as well as construction of secondary containment, will be conducted in accordance with the Plan and Northern's Procedures and SPCC plan. Northern will implement BMPs and procedures to avoid construction-related impacts on private wells within or near the workspaces of the Project.

For the wells identified with the 150 foot or 1,000-foot buffers, Northern will implement protective measures during construction, which include the following. Potential impacts on groundwater quality during construction could result from an unanticipated release of petroleum fuel from equipment within the proposed workspaces. Water quality testing of the adjacent wells will be conducted with landowner approval prior to and following construction activities. Wells will be tested through sample ports or through the nearest available yard hydrant or outside hose bib. Northern will test for the following parameters: well yield, total dissolved solids and volatile organic compounds. In the event that construction activities adversely affect a groundwater supply, Northern will provide a temporary source of potable water and the affected well will be restored to its pre-construction capacity and water quality, to the extent practicable. The mitigation measures described above will be implemented, as applicable, for private groundwater supply wells located between 150 feet and 1,000 feet of the Platte River HDD crossing during drilling activities.

Adjacent signs will be posted within the Project workspaces to prohibit overnight parking of equipment. Refueling or storage of hazardous liquids will not be allowed within a 200-foot radius of the private wells. Due to the nature of the construction operation, certain equipment (e.g., HDD and boring rigs) cannot be moved for refueling and may therefore be located within a well's setback radius. In cases where refueling needs to occur within

the setback radius, Northern will have an EI present for the operation and will have spill response equipment on-site and readily available. Secondary containment will be required for stationary equipment within the setback radius per Nebraska and Iowa regulations. Specific refueling, spill prevention and containment procedures are provided in the SPCC plan.

Northern's HDD Plan, provided in Resource Report 1, Appendix 1A, contains actions and mitigation measures that Northern will implement if an inadvertent release of drilling fluid occurs within or adjacent to a water supply well.

Based on the depth to bedrock, the presence of thick unconsolidated overburden, and the construction methods proposed for the Project, including the use of HDD to cross the Platte River, no impacts to public or private groundwater supply wells are anticipated. Additionally, Northern's review of available well records did not identify groundwater supply wells within Project construction workspaces, and applicable setback distances will be maintained. With implementation of the Plan and Northern's Procedures, SPCC and Northern's HDD Plan, the Project is not expected to have an adverse effect on groundwater resources or groundwater supply wells.

Groundwater/Karst Mitigation

Pipeline construction activities may affect groundwater resources through minor temporary impacts on shallow aquifers in proximity to the proposed facilities. These impacts may include increased turbidity, groundwater table fluctuations, short-term disruption of recharge, localized flow along the pipeline trench, or contamination from a spill or leak of hazardous substances. Most potential impacts will be avoided or minimized through the use of the standard construction methods and mitigation measures described in the Plan, Northern's Procedures and SPCC plan.

HDDs are planned for six of the waterbody and two wetland crossings. HDDs will exceed normal trench depths and likely penetrate the shallow water table. The drilling fluid is composed of water and non-toxic bentonite; therefore, HDD crossings are not expected to affect groundwater quality. Long-term water quality will not be affected by pipeline construction or subsequent operations as the pipe is free of chemicals when installed. By implementing the protective measures set forth in the SPCC plan and HDD Plan, long-term contamination due to construction activities is not anticipated.

During HDD activities, the possibility exists for drilling mud to reach the surface or encounter a void or fissure. In the event of the inadvertent release of drilling mud, Northern will implement measures in its HDD Plan. Specifically, Northern's contractor will attempt to seal the void using materials such as wood fibers, cotton seed husks, ground nut shells or other natural, environmentally inert materials. Special polymers that swell to several times their size when wet may be used. Grout or concrete plugs also may be used to fill subsurface voids or fissures. Concrete grout will typically harden quickly and have limited impact on groundwater flow or quality.

During construction, proper management of surface water will limit impacts of sedimentation on shallow groundwater resources and will lessen the potential for sinkhole dropouts during construction. Mitigation of surface runoff will be performed by silt fence, silt traps, sediment basins, and lined ditches where appropriate. Northern's EI staff will

assist with on-site determinations regarding dewatering locations and directing the discharge flow directions.

Review of USGS data and geotechnical borehole analysis identified no areas along the Project where carbonate bedrock is overlain by less than 50 feet of unconsolidated material. Geotechnical drilling conducted near the Platte River crossing on the Omaha 3rd branch line loop has confirmed the shallowest occurrence of carbonate bedrock is approximately 72 feet below ground surface. Based on these findings, Northern has determined that mitigation measures for surface karst features are not required.

The Platte River crossing on the Omaha 3rd branch line loop is the only location where an HDD will likely extend into bedrock. Bedrock encountered along this segment consists of sandstone, shale and limestone. Northern has completed a detailed feasibility report of this crossing that includes further details. The feasibility report is included in the HDD Plan, Resource Report 1, Appendix 1A.

General Mitigation Discussion

No springs were identified within the Project ESB during field surveys. If Northern discovers or identifies springs during construction, Northern's EI will monitor the spring during construction for water flow and turbidity. Specifically, the EI will monitor the spring for drilling fluid if an HDD will be completed in proximity of the spring. In the event of an inadvertent release of drilling mud, Northern will implement measures in its HDD Plan to minimize impacts on the spring.

Based on USGS and geotechnical borehole data shallow (less than 50 feet from ground surface) does not occur along the Project. However, due to proximity of the proposed pipeline to existing pipelines, no blasting will occur along the Project. Blasting is further discussed in Section 6.2, Resource Report 6.

Construction of the Project has the potential to have a temporary impact on groundwater resources in areas where the water table is shallow, and excavation occurs below the water table. If this occurs, there may be changes in water levels and/or turbidity of the surficial aquifer. These impacts are expected to be localized and temporary as water levels will quickly re-establish equilibrium and turbidity levels would subside. Construction and operation activities are not expected to impact groundwater quality from releases of fuel or hazardous materials given that protocols prescribed in the sections above and in the SPCC plan will be followed. Three WHPAs are crossed by or are located within the Project area; therefore, refueling activities or storage of hazardous liquids within local WHPA boundaries will be conducted in compliance with the respective WHPA requirements where those requirements are more stringent than the measures outlined in Northern's SPCC plan.

In the unlikely event that undocumented sites with contaminated soils or groundwater are encountered during construction, measures will be implemented to isolate and contain the suspected soil or groundwater contamination. Northern will collect and test samples of the substrate or groundwater to identify the contaminants. Once the type, magnitude and extent of the contamination are determined, a response plan will be developed for crossing or avoiding the site.

Northern will compact backfill materials once the pipeline is installed. Northern also will install sandbag trench breakers at intervals in accordance with the Plan. The trench breakers will limit preferential water flow along the pipeline during its long-term operation.

2.2 SURFACE WATER RESOURCES

As detailed in the wetland delineation reports (provided as Appendix 2B), an assessment of surface water resources was completed for all Project components using desktop review of USGS topographic maps (1:24,000 scale), NRCS soils, NHD and NWI data (Figure 2.1). Field survey data was used to supplement and confirm the desktop data. Field surveys were completed intermittently between November and December 2025. Northern completed biological field surveys for 98% of the parcels within the Project ESB. The remaining parcels to be surveyed within the Project in 2026 are provided in Table 2.2-1.

Table 2.2-1 Project Parcel Survey Status Summary[1]

Project Facility	MP		Parcel ID	Survey Status
	To	From		
Omaha 3rd branch line loop	5.20		CA-048	Proposed OMA-TAR-003 to be surveyed in 2026
NPPD Princeton Road power station branch line	0.00		GA-051	Expanded ESB to be surveyed in 2026
	7.98		GA-004 and GA-008	Proposed PRB-TAR-005 to be surveyed in 2026
	9.71	10.34	LA-023	Expanded ESB to be surveyed in 2026

[1]Parcels remaining to be surveyed are shown on Figure 2-2 and the Alignment Sheets in Resource Report 1.

During the 2025 field surveys, a total of 36 waterbody features were identified within the Project ESB. Of these features, Northern will cross seven waterbodies during construction activities. Field-delineated waterbodies are depicted on Figure 2-2. Table 2.2-2 contains information about the mapped waterbodies that will be crossed during project construction, including approximate MP, feature ID and name, flow regime, crossing length, state water quality classification, fishery type, and proposed crossing method.

Table 2.2-2 Waterbodies Crossed by the Project

MP	Waterbody	Waterbody Type	Crossing Length (feet)	Crossing Width – Bank to Bank (feet)	Construction Impact Acreage	Operational Impact Acreage	State Water Quality Use Designations[1]	Crossing Method (Contingency)	Section 303(d) Impaired Waters List
Omaha 3rd branch line loop									
7.44 – 7.64	OMA-S08	Intermittent	495[6]	24	0.07[2]	0.00[3]	AqL - Warmwater B, WS - Agricultural A, Rec, Ae	HDD	None
7.67 – 8.07	OMA-S10 (Platte River)	Perennial	2,027	1,600	0.28[2]	0.00[3]	AqL - Warmwater A, WS - Agricultural A, Rec, Ae, PDW	HDD	Recreation, aquatic life and public drinking water supply
Subtotal			**2,522**	**1,624**	**0.35**	**0.00**			
NPPD Princeton Road power station branch line									
2.94	PRB-S19 (Shaw Creek)	Perennial	12	10	<0.00[2]	0.00[3]	AqL - Warmwater A, WS - Agricultural A, Ae	HDD	None
7.48	PRB-S18	Intermittent	8	6	<0.00[2]	0.00[3]	N/A	HDD	None
7.56			33	6	<0.00	0.00		TAR[5]	None
11.3	PRB-S16 (Middle Branch Big Nemaha River)	Perennial	13	13	<0.00[2]	0.00[3]	AqL - Warmwater B, WS - Agricultural A, Ae	HDD	None
13.82	PRB-S15 (Spring Branch)	Intermittent	40	15	0.01[2]	0.00[3]	AqL - Warmwater B, WS - Agricultural A, Ae	HDD	None
14.59	PRB-S12	Intermittent	15	15	0.03	0.00	N/A	TWS/Open-cut[4]	None

MP	Waterbody	Waterbody Type	Crossing Length (feet)	Crossing Width – Bank to Bank (feet)	Construction Impact Acreage	Operational Impact Acreage	State Water Quality Use Designations[1]	Crossing Method (Contingency)	Section 303(d) Impaired Waters List
			15	15	<0.01	0.00	N/A	TAR[5]	None
Subtotal			**121**	**80**	**0.04**	**0.00**			
Des Moines C-line branch line extension, Des Moines C-line south loop uprate, Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 setting, Clarion compressor station, Beatrice compressor station, Guthrie Center compressor station, Oakland compressor station, Ogden compressor station, and Palmyra compressor station									
No waterbodies are crossed by these Project components									
Project Total			**2,643**	**1,704**	**0.39**	**0.00**			

[1] State Water Classification: AqL= Aquatic Life, WS= Water Supply, Ae= Aesthetics, PDW= Public Drinking Water. See additional discussion in 2.2.5.
[2] Impacts will be limited to foot traffic within a six-foot-wide travel lane between the HDD entry and exit points.
[3] Waterbody crossed by the Project via HDD. Northern will not conduct routine maintenance between the entry and exit points in riparian areas; therefore, no impacts on the waterbody will occur during operation.
[4] Waterbody crossed by the Project via open-cut will include the use of dam and flume or dam and pump and installation of a temporary clear span bridge (TCSB) to establish and maintain a dry working cell through the waterbody.
[5] Waterbodies that are within TARs will use installation of a TCSBs to avoid impacts, as needed, and to the extent possible.
[6] HDD will occur in parallel with the waterbody.

Northern will complete a total of seven waterbody crossings during Project construction. Six waterbodies will be crossed using HDD methods in order to minimize direct impacts. Of the six waterbodies being crossed via HDD, one (the Platte River - delineated as OMA-S10) has crossing widths greater than 100 feet. Northern has prepared an HDD plan and profile and site-specific plan that will serve as the FERC site-specific crossing plan for the major waterbody crossing. The required FERC site-specific crossing plans are provided in the HDD Plan in Resource Report 1, Appendix 1A. Two of the waterbodies crossed by pipeline installation also will require a TCSB for a TAR.

Northern will complete open-cut, dry-ditch crossings of one waterbody (PRB-S12) by implementing the construction techniques in Northern's Procedures in V.B.6. These will include but are not limited to:

- Installing erosion and sediment control devices along the stream banks prior to the start of disturbance
- Flagging waterbody buffers (e.g., ETWS setbacks, no refueling zones) with signs or highly visible flagging
- Completing the open-cut crossings of the waterbodies during no-to-low-flow conditions
- Placing spoil piles at least 15 feet from the water's edge or in the adjacent ETWS
- Installing either a dam and flume or a dam and pump. Flumes will be inspected routinely while in place to ensure they are functioning appropriately. Pumps will be monitored continuously while in place to assure compliance with applicable NPDES permits. Dams will be constructed with materials that prevent sediment or contamination from entering the waterbody and with materials that do not extend into banks (e.g., sandbags)
- Installing baffle devices to prevent streambed scour and the discharge points of the pump or flume
- Installing sediment barriers to prevent the downstream flow of spoil to sediment-laden water
- Replacing the waterbody subsoil then replace the stream bed spoil and restore it to preconstruction condition. Streambank will be restored to preconstruction condition and stabilized
- Carefully remove the in-stream devices (e.g., dam and pump or dam and flume) to slowly restore natural water flow and prevent scouring or sediment transport downstream

During trench dewatering, water will be pumped from the trench via a submersible pump equipped with a float and then discharged through a geotextile filter bag and/or straw bale dewatering structure to a well-vegetated upland area. Dewatering will be conducted to avoid the flow of silt-laden water directly into waterbodies.

A total of three TCSBs will be needed; two at PRB-S12 (one for the open cut and one for a TAR) and one at PRB-S18 for a TAR. The following stipulations will apply to these temporary bridges.

- The temporary bridge will be installed across the waterbody to allow for equipment access. The bridge will be constructed and maintained to allow for unrestricted flow of water and to prevent soil from entering the waterbody
- The temporary bridge will span between the waterbody top of banks
- The temporary bridge will be designed to withstand and pass the highest waterbody flow expected to occur while the bridge is in place
- Use or modifications to TCSBs will be documented in the SWPPP
- The temporary bridge will be removed as part of final cleanup and restoration

Northern will restore waterbody beds and banks to pre-construction conditions once the crossing is completed, and no permanent fill will be placed within a waterbody crossed by the Project. HDD entry and exit points also will be restored as outlined in the Project-specific SWPPPs (Resource Report 7, Appendix 7D).

2.2.1 Contaminated Sediments

The primary potential sources of sediment contamination are the practices and processes associated with industrial facilities or natural geological background sources. Northern reviewed the EPA Superfund sites and Tier 1 Sediment Sites and determined that no known sites are located within Project workspaces (EPA 2026b). A review of the IDNR IWIS identified one site contamination report at the Oakland compressor station associated with a burn pit (Refer to Section 2.1.4 for details regarding known onsite contaminants). No waterbodies are located within the planned Project workspace at the Oakland compressor station; therefore, impacts to surface water resources from contaminated soils are not anticipated.

Although unlikely, if contaminated soils are encountered during Project construction activities, erosion and sediment control measures implemented during construction, such as straw or hay bales and silt fencing, will minimize the potential for sediment transport from disturbed workspaces into nearby waterbodies. Additional procedures to avoid or mitigate potential contaminant impacts are described in Northern's SPCC Plan, provided in Appendix 2A.

2.2.2 Public Watershed Areas

Public watersheds consist of land areas that drain or contribute to one specific location (EPA 2026c). Table 2.2-2 lists watersheds crossed by the Project.

Table 2.2-3 Watersheds Crossed by the Project

Facility	MP		Watershed (Hydrology Unit Code 12)	Watershed Districts
	From	To		
Omaha 3rd branch line loop	0.00	0.63	Beaver Creek-Weeping Water Creek (102400010202)	Lower Platte South NRD
	0.63	2.4	Cascade Creek-Weeping Water Creek (102400010204)	Lower Platte South NRD
	2.4	3.39	Decker Creek-Platte River (102002020203)	Lower Platte South NRD
	3.39	3.88	Mill Creek-Platte River (102002020207)	Lower Platte South NRD
	3.88	5.20	Decker Creek-Platte River (102002020203)	Lower Platte South NRD
	5.20	5.71	Mill Creek-Platte River (102002020207)	Lower Platte South NRD
	5.71	6.24	Decker Creek-Platte River (102002020203)	Lower Platte South NRD
	6.24	6.65	Mill Creek-Platte River (102002020207)	Lower Platte South NRD
	6.65	7.00	Decker Creek-Platte River (102002020203)	Lower Platte South NRD
	7.00	9.03	Mill Creek-Platte River (102002020207)	Papio-Missouri River NRD
NPPD Princeton Road power station branch line	0.00	4.43	Shaw Creek (102400080101)	Nemaha NRD
	4.43	5.61	Headwaters Middle Branch Big Nemaha River (102400080102)	Nemaha NRD
	5.61	9.51	Headwaters Indian Creek (102702020402)	Lower Big Blue NRD
	9.51	11.67	Headwaters Middle Branch Big Nemaha River (102400080102)	Nemaha NRD
	11.67	14.64	Wittstruck Creek-Salt Creek (102002030103)	Lower Platte South NRD
Des Moines C-line branch line extension	16.10	18.58	Murphy Branch-Des Moines River (071000041001)	Beaver Creek WMA
Des Moines C-line south loop uprate	N/A		Beaver Creek (071000040911)	Beaver Creek WMA
Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 setting	N/A		Headwaters Middle Branch Big Nemaha River (102400080102)	Nemaha NRD
Clarion compressor station	N/A		Little Eagle Creek (071000050401)	Boone River WMA
Beatrice compressor station	N/A		City of Beatrice-Big Blue River (102702020409)	Lower Big Blue NRD
Guthrie Center compressor station	N/A		Upper Troublesome Creek (102400030101)	East Nishnabotna Watershed Coalition
Oakland compressor station	N/A		Jordan Creek (102400020301)	West Nishnabotna Watershed Coalition
Ogden compressor station	N/A		Middle Beaver Creek (071000040903)	Beaver Creek WMA
			East Beaver Creek (071000040904)	

Palmyra compressor station	N/A	Hooper Creek (102400060201)	Nemaha NRD

Source: USGS, 2006; NDWEE, 2026, IDNR, 2026b

In Nebraska, local governmental entities known as NRDs are responsible for the conservation and management of natural resources within their respective major river basin boundaries. Project components in Nebraska cross a total of four NRDs: Papio-Missouri River, Lower Platte, Nemaha, and Lower Big Blue. District boundaries crossed by the Project are identified in Table 2.2-3.

In Iowa, watershed planning and management may be conducted at the local level by WMAs, which provide a cooperative framework for cities, counties, SWCDs and other stakeholders. Table 2.2-3 identifies the Project components in Iowa and the corresponding WMAs.

Northern will coordinate with the applicable NRDs in Nebraska and WMAs in Iowa to identify any active watershed management projects that could be affected by Project construction activities and to determine any measures necessary to minimize or avoid potential impacts, as appropriate. Correspondence and records of communication with NRDs and WMAs are provided in Appendix 2D.

Northern will follow FERC Plans and its Procedures, as well as comply with applicable state and local requirements, to implement BMPs during construction to minimize potential impacts to watershed resources and local watershed management projects. Based on Project design and implementation of these measures, Northern does not anticipate that watershed management projects will be adversely affected by the Project.

2.2.3 National Wild and Scenic Rivers System

The National Wild and Scenic Rivers System was created by Congress in 1968 to preserve rivers with outstanding natural, cultural and recreational values in a free-flowing condition. No waterbodies crossed by the Project are included in the National Wild and Scenic Rivers System (National Wild and Scenic River System 2026).

2.2.4 Section 303 (d) List of Impaired Waters

Under Section 303(d) of the CWA, states are required to assess all waters of the state to determine if they meet water quality standards; list waters that do not meet standards and update the list biannually; and conduct TMDL studies to set pollutant-reduction goals needed to restore waters to the extent that they meet water quality standards for designated uses.

The Platte River (OMA-S10) is designated as impaired for recreation, aquatic life and public drinking water supply. Northern plans to cross the Platte River via HDD as part of the Omaha 3rd branch line loop and does not anticipate direct impacts on the waterbody. No other Project components in Nebraska and no Project components in Iowa cross impaired waters. For the impaired waters, the mitigation measures that will be used to protect them are described in detail within Project-specific SWPPPs, included in Resource Report 7, Appendix 7D.

2.2.5 Outstanding Resource Value Waters

NDWEE and IDNR designate certain surface waters as State Resource Waters and Outstanding Iowa Waters respectively because of their exceptional qualities. No waterways crossed by the Project are designated as Nebraska State Resource Waters or Outstanding Iowa Waters waterbodies (NDEQ 2019; IDNR 2026a).

2.2.7 U.S. Army Corps of Engineers Section 10 Waters

Navigable waters are defined by 33 CFR Part 329 as those waters that are subject to the ebb and flow of the tide and/or are presently used, have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Navigable waters are designated by the USACE and regulated under Section 10 of the Rivers and Harbors Act of 1899.

None of the waters crossed by the Project are considered navigable by the Rock Island or Omaha USACE Districts or are included within the USACE Section 10 Waters list (USACE 2012).

2.2.8 Other Special State and Local Waterbody Designations

Trout species, and the cold water, gravel-bed stream habitats they require, are particularly sensitive to environmental impacts such as sedimentation. Streams designated as trout waters receive additional protections under regulations administered by the NDWEE, the IDNR and the USACE.

Based on a review of the Nebraska Game and Parks Commission's *Trout Fishing in Nebraska Streams* maps and the IDNR Trout Stream Search database, which identify designated trout streams in Nebraska and Iowa, respectively, no waterbodies crossed by the Project are designated as trout streams (NGPC 2002; IDNR 2026b).

2.2.9 Potable Surface Water Supply

The Platte River (delineated as OMA-S10) is designated for use as a public drinking water supply. Northern plans to cross the Platte River using HDD as part of the Omaha 3rd branch line loop and does not anticipate direct impacts to the waterbody. No other Project components in Nebraska, and no Project components in Iowa, cross surface waters with sufficient flow to provide a reliable potable water supply.

Northern will coordinate with the NDWEE to identify any applicable protective measures necessary to complete the Platte River HDD crossing, as necessary. Northern will comply with FERC's Plan and its Procedures, Northern's SPCC Plan, and its HDD Plan to prevent or minimize indirect impacts from construction activities that could potentially affect downstream potable water supplies. Based on Project design, construction methods, and implementation of these measures, Northern does not anticipate impacts to public surface water supplies as a result of Project activities.

2.2.10 Floodplains

FEMA defines flood zones based on flood risk and type of flooding. SFHAs are areas that will be inundated by the flood events having a 1% chance of being equaled or exceeded in any given year (i.e., the 100-year or base flood). FEMA defines moderate flood hazard areas as those between the limits of the base flood and the 0.2%-annual-chance, or 500-

year flood. Areas of minimal flood hazard (i.e., areas outside the regulatory floodplain) are those that are above the elevation of the 0.2%-annual-chance flood (FEMA 2026).

A review of FEMA Flood Insurance Rate Maps indicates that no Project components in Iowa, as well as the Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 setting, the Beatrice compressor station, and the Palmyra compressor station in Nebraska, are located within identified SFHAs or moderate flood hazard areas (Figure 6-3). The remaining components cross SFHAs as described in Resource Report 6 Section 6.4.4, Flooding and Scour.

To minimize potential impacts within SFHAs, Northern will secure construction mats as necessary, anchor or relocate loose equipment outside of SFHAs, and limit fuel storage and refueling activities within SFHAs. Flood zones and SFHAs are discussed further in Resource Report 6, Section 6.4.4, and are depicted on Figure 6-3.

Project work within the SHFAs and any moderate flood hazard area will only result in temporary disturbance; no permanent fill or structures are proposed within a regulated floodplain that is crossed by the Project. Northern will coordinate with applicable NRDs and the NDWEE to determine the need for a floodplain development permit to authorize construction activities within an SFHA. Correspondence received will be provided to FERC in a supplemental submittal.

2.2.11 Hydrostatic Test Water and Dust Suppression

Hydrostatic testing will be conducted in accordance with Department of Transportation regulations Title 49 CFR Part 192 to verify the integrity of the pipe and the piping components before being placed into service. Northern will obtain coverage under the respective Hydrostatic Test Water NPDES Discharge Permits issued by the NDWEE (NPDES Permit NEG672000) and IDNR (NPDES General Permit #8), discussed in Resource Report 1.

Hydrostatic test water will be obtained from off-site sources and brought to the Project in compliance with state regulations and existing water rights. No chemical additives will be mixed with the hydrostatic test water. Following testing, Northern plans to discharge the water to the ground surface within the project areas. Discharge of test water will be conducted in accordance with issued NPDES permits and will employ an energy-dissipating device such as a straw bale dewatering structure. Discharge rates will be controlled to prevent erosion, scouring and sedimentation, flooding, or the introduction of foreign or toxic substances into adjacent waterbodies. Hydrostatic test waters will be discharged in well-vegetated upland areas at sufficient distances from surface waters and karst features, if observed, and at low enough discharge rates that waterbodies will not be impacted. Specifically, no hydrostatic pressure test water will be obtained from or discharged within the Platte River. Water quality sampling of discharge will be conducted as dictated by permit conditions.

Northern estimates approximately 322,900 gallons of discharged water will be required for the Project components in Iowa, and approximately 3,704,600 of discharged water will be required for the Project components in Nebraska.

No significant water quality impacts are anticipated as a result of discharge from hydrostatic testing. The new pipeline facilities will consist of new steel pipe that will be free of

chemicals or lubricant and no additives will be used. Table 1.3-1 in Resource Report 1 lists potential hydrostatic water sources for testing the pipeline segments, the number of test sections and approximate volume of water to be used.

As outlined in Resource Report 1, Section 1.3.4, water also may be utilized for the control and mitigation of fugitive dust in areas disturbed for construction, such as access roads. Typically, dust control is provided by contractors utilizing water tanker trucks and water is obtained from a municipal source, as necessary. Actual amounts required will vary based on climatic conditions at the time of construction. Northern estimates that an additional 12,600,000 gallons of water will be discharged for dust control for Project components located in Iowa and Nebraska.

2.2.12 Sensitive Surface Waters/Waterbody Quality Classification

Sensitive waterbodies include those designated under Section 305(b) or Section 303(d) of the CWA; those for domestic use and those where fish or other listed species are present. Pursuant to Section 303(d) of the CWA, states, territories and authorized tribes are required to develop a list of waters that do not meet or are not expected to meet applicable water quality standards. The law requires that these jurisdictions establish priority rankings for waters on the list and develop action plans emphasizing a reduction of TMDLs to improve water quality. The EPA suggests that states use their guidelines for "integrated reporting" that combine requirements of Sections 305(b), 303(d) and 314 of the CWA.

The NDWEE is the agency charged with classifying waterbodies in Nebraska. Consistent with the requirements of the CWA, the NDWEE has established water quality standards, including the identification of beneficial uses of the state's waters, numeric standards and narrative criteria, and non-degradation protections for high-quality or unique waters. The NDWEE has determined every surface water has the following designated uses: aquatic life, recreation, water supply, aesthetics and recreation classified waters per Nebraska administrative code Title 117 (NDWEE, 2019).

- Aquatic Life and Recreation – Waters of the state that support or may support fish, other aquatic life, bathing, boating, or other recreational purposes
    - Class 1 – Denoting a Cold Water designation
    - Class 2 – Denoting a Warm Water designation
        - Each class is sub classifications of A and B, denoting stream flow
- Water Supply
    - Industrial Consumption
        - Waters of the state that are or may be used as a source of supply for industrial process or cooling water or any other industrial or commercial purposes
    - Irrigation (Agriculture)
        - Class A – used for general agricultural purposes without treatment, but with water quality criteria
        - Class B - these are waters where the natural background water quality limits its use for agricultural purposes. No water quality criteria are assigned to protect this use
    - Public Drinking Water

        - Waters of the state that are or may be used as a source of supply for drinking, culinary or food processing use, or other domestic purposes
- Aesthetic
    - Waters that provide an aesthetic value
- Recreation
    - Waters which are used, or have a high potential to be used, for primary contact recreational activities

A total of seven waterbodies are crossed underneath by HDD, TWS/open-cut or TAR workspace areas along the Omaha 3rd branch line loop and NPPD Princeton Road power station branch line in Nebraska. No other Nebraska Project components cross waterbodies. Waterbodies crossed by the Nebraska Project components include the following classifications: Aquatic Life and Recreation – Class 2 (warmwater) – Subclass A and B, Water Supply – Irrigation (Agricultural – Class A), Aesthetic, and Recreation. Refer to Table 2.2-2 for water quality classifications for each waterbody crossed.

Northern plans to cross six of the seven waterbodies identified in Nebraska using HDD methods to avoid direct impacts. The other waterbody will be crossed using open-cut methods and a TCSB to span the waterbody, in order to minimize direct impacts. Two of the waterbodies that are crossed via HDD and open-cut, respectively, also will be crossed by a TARs via construction of a TCSB to avoid direct impacts to them. Northern will follow FERC's Plan and its Procedures to minimize sedimentation and construction-related stormwater runoff into the waterbodies crossed by the Project to ensure compliance with applicable state water quality standards. Specific waterbody crossing construction methods and mitigation procedures are further described in Section 2.2.14. No waterbodies are crossed by Project components in Iowa.

2.2.13 Construction Permits

A summary of permits and approvals associated with the proposed construction and operation of the Project near waterbodies is provided in Resource Report 1 Table 1.6-1.

The Omaha 3rd branch line loop and Princeton Road power station branch line are anticipated to require coverage under the USACE's pre-construction notification process for Nationwide Permit 12 (Utility Line Activities). No other Project components require authorization under the USACE Nationwide Permit program or coverage under an individual Section 401 Water Quality Certification issued by the NDWEE or IDNR. In addition, no waterbody crossings will require a Section 10 permit from the USACE, and no Project components cross a USACE civil works project, requiring a Section 408 permit. Agency consultations related to proposed surface water impacts from construction activities are summarized in Section 2.4. Correspondence is provided in Appendix 2D.

A description of all applicable stormwater discharges, dewatering and water allocation permits required for the Project area discussed in Resource Report 7, Section 7.5.

Northern will follow standards and implement BMPs, as necessary that are outlined in the Project-specific SWPPPS in order to comply with state NPDES requirements. Permits received will be provided as attachments to the Project-specific SWPPPs, as well as contractors performing construction activities onsite. Northern will provide authorizations

received from state agencies and associated correspondences to FERC in a supplemental submittal.

2.2.14 Waterbody Construction and Mitigation Procedures

Northern will complete work near waterways in accordance with the FERC Plan and its Procedures and in compliance with the CWA Section 401 water quality certification conditions applicable to the USACE Nationwide Permit 12. Northern will complete work near waterways in accordance with the Plan and its Procedures with the exception waterbodies listed in Table 1.3-3, Resource Report 1. Northern will complete a total of seven waterbody crossings during Project construction; six will be crossed using HDD methods to minimize direct impacts. The other will be crossed via open-cut, dry-ditch crossings methods by implementing the construction techniques in Northern's Procedures in V.B.6. Two of the waterbodies that are crossed via HDD and open-cut, respectively, also will be crossed by TARs with TCSBs. Details of waterbody crossings, dry-ditch construction methods, and use of TCSBs are discussed in Section 2.2.

As proposed, the Project will not cause permanent impacts on surface waterbodies. Construction practices will follow the Plan and Northern's Procedures, which contain BMPs intended to reduce ground disturbance, minimize erosion and sediment run off and promote revegetation within the construction area. Northern's EIs will document that all construction workspace along with the waterbody boundaries are staked by a civil survey firm prior to the start of construction. The refueling setback at each waterbody also will be demarcated with signage placed by Northern's EIs. Crossing construction methods are also discussed in detail in Resource Report 1, Section 1.3.4.

All HDD waterbody crossings will have a depth of at least 27 feet below the waterbody's bed for the Project. The one open-cut waterbody crossing will have a depth of cover of at least four feet below the waterbody's bed. All waterbody crossings utilizing open-cut methods also will utilize dry ditch construction methods to install the pipeline through the waterbody. Northern will use dam and flume or dam and pump methods to maintain downstream flow and create a dry workspace for the pipe installation. Use of dam and pump dry-ditch construction method will require continuous monitoring to prevent scour and ensure compliance with applicable NPDES permit conditions. Upon completion of the waterbody crossing, the waterbody will be returned to pre-construction conditions to the extent practicable. Additional information regarding the safety factors for the HDDs is provided in Resource Report 6, Section 6.6. Additional information on the depths of the HDDs is provided in Resource Report 6, Table 6.7-1.

There is one major waterbody (over 100 feet in width) that is crossed by the Omaha 3rd branch line loop Project component (Platte River – delineated as OMA-S10). No other Project components contain major waterbody crossings. The major waterbody will be crossed by HDD. Northern has prepared an individual HDD plan and profile and site-specific plan that will serve as the FERC site-specific crossing plan for the major waterbody crossing; and is provided in the HDD Plan in Resource Report 1, Appendix 1A-2.

For all waterbody crossings, fuels, lubricants or other potentially hazardous materials used during routine construction can temporarily impact aquatic habitats and resources if released into the environment. The SPCC plan and Northern's Procedures for the Project

provide restrictions and mitigation measures to minimize potential impacts associated with the release of fuels, lubricants or other potentially toxic materials used during routine construction. To minimize potential impacts, Northern will restrict the storage, location and use of hazardous materials. Refueling and storing of hazardous materials will be prohibited within 100 feet of a waterbody during construction. In addition to measures that minimize and avoid spill related impacts, the SPCC plan contains measures to mitigate releases should releases occur. If trench dewatering is necessary, water will be pumped from the trench via a submersible pump equipped with a float and then discharged through a geotextile filter bag and/or straw bale dewatering structure to a well-vegetated upland area. Dewatering will be conducted, as necessary, to aid in pipe installation and avoid the flow of silt-laden water directly into waterbodies.

Soil disturbances in waterbodies and construction activity within Project work areas adjacent to waterbodies could result in potential erosion and sedimentation into the waterbodies. As part of Northern's temporary erosion and sediment control measures for the Project, Northern will construct or install sediment barriers, stormwater diversions, mulch, and seed to establish ground cover as necessary to protect the potentially affected waterbodies. Northern will restore slopes and contours to preconstruction conditions and will restore vegetation using approved seed mixes. The temporary and permanent erosion and sediment control measures will be installed as specified in the FERC's Plan and its Procedures, the project-specific SWPPPs and applicable stormwater permits and water quality conditions. Construction work areas will be allowed to return to preconstruction vegetation and land use(s) and will be permanently maintained pursuant to the Plan and Northern's Procedures. With implementation of these measures, the potential for erosion and sedimentation to adversely affect waterbodies will be minimized to the maximum extent practicable.

In the event of an inadvertent release of drilling mud during HDD activities, Northern will implement measures as outlined in its HDD Monitoring, Inadvertent Return Response, and Contingency Plan located in Resource Report 1, Appendix 1A.

Precipitation and/or the seepage of groundwater can necessitate the dewatering of trenches in order for construction to proceed. During trench dewatering, water will be pumped from the trench, discharged into a well vegetated upland area and/or filtered through a geotextile sediment filter bag or sediment barrier. Dewatering will be conducted in a manner designed to prevent the flow of silt-laden water directly into adjacent waterbodies and in accordance with state permitting requirements.

2.3 WETLANDS

Wetlands that meet the Waters of the U.S. requirements are subject to regulation by the USACE under the CWA, and the jurisdictional regulatory authority lies with the USACE. In Nebraska, the NDWEE has regulatory authority over wetlands, navigable waters, and adjacent lands under the Nebraska Administrative Code Title 457 – Department of Natural Resources Rules for Surface Water. In Iowa the IDNR has regulatory authority over wetlands, navigable waters and adjacent lands under Iowa Chapter 456B Special Provisions – Natural Resources Department.

Northern performed a desktop review of the Project area using NWI data, USGS data, NHD data, NRCS soils information and aerial orthophotography to identify potential wetlands

or wet signatures. Additionally, Northern completed a review of historical aerial imagery for agricultural areas as wetlands are often problematic to locate in farmed areas. The review consisted of multiple years of aerial imagery in areas with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wet signatures. A wet signature is field evidence, recorded by a photograph, of ponding, flooding or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria. Areas with wet signatures were investigated in the field and wetland boundaries were verified. The NWI data is shown on Figure 2-1.

Field surveys were completed in 2025 to locate and verify the presence of wetlands within the ESB using the Routine On-Site Determination Method defined in the USACE Wetland Delineation Manual (USACE 1987), subsequent guidance documents (USACE 1991 and 1992), and the Midwest Regional Supplement (USACE 2010). Copies of the wetland delineation reports are included in Appendix 2B. Table 2.2 1 lists the Project parcels that were not surveyed in 2025 and are scheduled for survey in 2026.

Field surveys for wetlands and waterways within the Ogden compressor station ESB were completed in April 2021. No wetlands or perennial/intermittent waterways were identified within the Ogden compressor station ESB during the 2021 field surveys. The wetland delineation report for the Ogden compressor station is included in the previous FERC Docket # CP22-42-000.

2.3.1 Existing Resources

Forty-four palustrine emergent wetlands were identified within the ESB surveyed for the Project; however, only 14 wetlands will be crossed by the Project. Field-delineated wetland boundaries are shown in Figure 2-2. The palustrine emergent wetlands that will be crossed by the Project are classified as seasonally flooded basin/farmed wetland, disturbed wet meadow and shallow marsh.

No palustrine forested or palustrine scrub shrub wetlands were identified within the Project ESB. Wetland classifications are discussed in greater detail below.

Seasonally Flooded Basin/Farmed Wetland

Palustrine emergent wetlands characterized as seasonally flooded basin/farmed wetland communities consisted of stressed or recently harvested corn (*Zea mays*) or soybean (*Glycine max*), or grass and sedge mixes including reed canary grass (*Phalaris arundinacea*), barnyard grass (*Echinochloa crus-galli*), yellow nutsedge (*Cyperus esculentus*), witchgrass (*Panicum capillare*), common reed (*Phragmites australis*), rough-fruited waterhemp (*Amaranthus tuberculatus*), fall panic grass (*Panicum dichotomiflorum*), and curly dock (*Rumex crispus*). The most common indicators of hydrology at these locations included: B6 – Surface Soils Cracks, C9 – Saturation Visible on Aerial Imagery, D1 – Stunted or Stressed Plants, D2 – Geomorphic Position, and D5 – the FAC-Neutral Test. Hydric soil indicators observed within seasonally flooded communities included A12 – Thick Dark Surface, F6 – Redox Dark Surface, and Other. The hydric soil indicator Other was assumed based on the presence of hydrophytic vegetation and hydrology and professional judgement that the continuation of the soil profile would be hydric.

The field delineated seasonally flooded wetlands were typically located in active farm fields as depressional features.

Disturbed Wet Meadows

Palustrine emergent wetlands characterized as wet meadows usually lack standing water throughout most of the growing season but are waterlogged within a few inches of the surface. Wet meadows will often fill shallow basins and sloughs. Vegetation typically includes grasses, sedges, rushes and short broad-leaved plants. Wet meadow wetlands identified within the Project ESB were considered disturbed due to a vegetation dominance of invasive species such as reed canary grass, and/or the presence of disturbed vegetation and soils from conventional farming practices such as tilling, plowing, and cropping. The disturbed wet meadows were found in or alongside cropped agricultural fields and pastures, and in roadside ROW.

Typical vegetative species observed within these wetlands consisted of reed canary grass (*Phalaris arundinacea*), prairie cordgrass (*Spartina pectinata*). lance-leaved aster (*Symphyotrichum lanceolatum*), barnyard grass (*Echinochloa crus-galli*), water smartweed (*Persicaria pensylvanica*), tall scouring rush (*Equisetum praealtum*), grass-leaved goldenrod (*Euthamia graminifolia*), yellow foxtail (*Setaria pumila*), shining flatsedge (*Cyperus bipartitus*), common reed (*Phragmites australis*), giant ragweed (*Ambrosia trifida*) and occasionally a scattered shrub layer of black willow (*Salix nigra*). The most common indicators of hydrology at these locations consisted of C3 – Oxidized Rhizospheres on Living Roots, B6 - Surface Soil Cracks, B8 - Sparsely Vegetated Concave Surface, B10 - Drainage Patterns, B14 - True Aquatic Plants, C9 - Saturation Visible on Aerial Imagery, D2 - Geomorphic Position and D5 - the FAC-Neutral Test.

Hydric soil indicators observed within wet meadows included A11 - Depleted Below Dark Surface, F3 - Depleted Matrix, F6 - Redox Dark Surface and Other. The hydric soil indicator Other was assumed based on the presence of hydrophytic vegetation and hydrology, and professional judgement that the continuation of the soil profile would be hydric.

Shallow Marsh

Palustrine emergent wetlands characterized as shallow marshes usually are inundated with standing water most of the growing season. Vegetation typically consists of emergent and fully aquatic plants. Typical vegetative species documented within these communities consisted of hybrid cattail (*Typha X glauca*), river bulrush (*Bolboschoenus fluviatilis*), reed canary grass (*Phalaris arundinacea*), and common reed (*Phragmites australis*). The most common hydrology indicators in this community were A1 - Surface Water, A2 - High Water Table, A3 - Saturation, D2 - Geomorphic Position, and D5 – the FAC-Neutral Test. Hydric soil indicators observed within the shallow marsh communities included F6 – Redox Dark Surface.

Table 2.3-1 Wetlands Crossed by the Project

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Primary Wetland Crossing Method	Area Affected by Construction (acres)	Area Affected by Operation (acres)		Wetland Setting	Wetland Function	Aquatic Resource	USACE Regulated (Y/N)[7]
	From	To					Operational Fill	Operational Maintenance[3,5]				
Omaha 3rd Branch Line Loop												
OMA-W08	0.11	0.12	Degraded wet meadow / PEM1B	44	TWS/Open-Cut	0.07[6]	-	0.05	Depressional	Groundwater Recharge	Groundwater	Potentially
OMA-W09	1.15	1.15	Degraded wet meadow / PEM1B	13	TWS/Open-Cut	0.02[6]	-	0.02	Depressional	Groundwater Recharge	Groundwater, OMA-S02	Potentially
OMA-W01	8.57	8.61	Degraded wet meadow / PEM1B	176	TWS/Open-Cut	0.29[6]	-	0.20	Depressional	Groundwater Recharge	Groundwater, OMA-OW02, OMA-OW04, OMA-S11	Potentially
			Subtotal	**233**		**0.38**	**-**	**0.27**				
NPPD Princeton Road Power Station Branch Line												
PRB-W12	3.28	3.29	Degraded wet meadow / PEM1B	29	TWS/Open-Cut	0.05[6]	-	0.04	Depressional	Groundwater Recharge	Groundwater	Not Likely
PRB-W15	4.94	4.95	Degraded wet meadow / PEM1B	41	TWS/Open-Cut	0.08[6]	-	-	Depressional	Groundwater Recharge	Groundwater	Potentially
PRB-W13	5.43	5.43	Degraded wet meadow / PEM1B	12	TWS/Open-Cut	0.01[6]	-	-	Depressional	Groundwater Recharge	Groundwater	Potentially
	5.44	5.44		22	TWS/Open-Cut	0.03[6]	-	-				
PRB-W29	7.24	7.24	Shallow Marsh / PEM1C	30	TWS/Open-Cut	0.06[6]	-	0.04	Depressional	Wildlife Habitat / Groundwater Recharge	Groundwater	Potentially
PRB-W10	7.46	7.47	Shallow Marsh / PEM1C	36	HDD	0.01[9]	-	0.00[4]	Depressional	Wildlife Habitat / Groundwater Recharge	Groundwater, PRB-S18	Potentially
	N/A			N/A	TAR	0.01[6]	-	-				
PRB-W11	7.58	7.58	Degraded wet meadow / PEM1B	0	HDD	<0.01[8,9]	-	0.00[4]	Depressional	Groundwater Recharge	Groundwater	Not Likely
PRB-W34	13.24	13.25	Degraded wet meadow / PEM1B	31	TWS/Open-Cut	0.04[6]	-	0.03	Depressional	Groundwater Recharge	Groundwater	Not Likely
			Subtotal	**201**		**0.29**	**-**	**0.11**				
Des Moines C-Line Branch Line Extension												
DMS-W03	16.28	16.28	Seasonally flooded basin/farmed wetland / PEM1Af	16	TWS/Open-Cut	0.02	-	0.02	Depressional	Wildlife Habitat	Precipitation	Not Likely

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Primary Wetland Crossing Method	Area Affected by Construction (acres)	Area Affected by Operation (acres)		Wetland Setting	Wetland Function	Aquatic Resource	USACE Regulated (Y/N)[7]
	From	To					Operational Fill	Operational Maintenance[3,5]				
Subtotal				**16**		**0.02**	**-**	**0.02**				
Des Moines C-Line South Loop Uprate												
No wetlands were identified within Project component workspace												
Beatrice to Palmyra D-line and Beatrice to Palmyra E-line Block Valve 5 Setting												
No wetlands were identified within Project component workspace												
Clarion Compressor Station												
CCS-W01	N/A		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	ETWS	1.34[6]	1.07[10]	-	Depressional	Wildlife Habitat	Precipitation	Non-Jurisdictional[11]
CCS-W02	N/A		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	ETWS	0.15[6]	0.14[10]	-	Depressional	Wildlife Habitat	Precipitation	Non-Jurisdictional[11]
CCS-W03	N/A		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	ETWS	0.87[6]	0.53[10]	-	Depressional	Wildlife Habitat	Precipitation	Non-Jurisdictional[11]
Subtotal				**N/A**		**2.36**	**1.74**	**-**				
Beatrice, Guthrie Center, Oakland, Ogden, and Palmyra Compressor Stations												
No wetlands were identified within these Project components workspaces												
Project Total				**450**		**3.05**	**1.74**	**0.40**				

[1] Wetland Classification based on Cowardin, Classification of Wetlands and Deepwater Habitats: PEM1A - Palustrine Emergent – persistent - temporarily flooded (Seasonally Flooded Basin/Farmed Wetland), PEM1B - Palustrine Emergent – persistent - saturated (Degraded wet meadow), PEM1C - Palustrine Emergent – persistent - seasonally flooded (Shallow Marsh). The listed classification represents the wetland community at the crossing locations.
[2] Wetland crossing lengths of pipeline.
[3] Area required to be cleared at a frequency necessary to maintain the ROW in an herbaceous state.
[4] Wetlands crossed by the Project via HDD. Northern will not conduct maintenance between the entry and exit pits; therefore, no impacts on the wetland will occur during operation.
[5] Wetland impacts will occur from routine mowing operations; however, the wetland currently consist of a PEM community, therefore no community type conversion will occur.
[6] Construction related wetland impacts will not include below-ground impacts
[7] Jurisdiction determination per USACE determination 33 CFR Part 328 on November 13, 1987.
[8] Impacts are less than 0.01 acre in size
[9] Impacts will be limited to foot traffic within a six-foot-wide travel lane between the HDD entry and exit points.
[10] Permanent fill placement will be required within wetland.
[11] Jurisdiction determined by the USACE (MVR-0423)
- Represents 0.00 acres

The Project will result in a total of 3.05 acres of temporary impact and 2.14 acres of operational impact on wetlands. Of the 2.14 acres of operational impact that will occur as a result of the Project, permanent fill placement totaling 1.74 acres will occur to construct the Clarion compressor station associated with the proposed facility yard. In March 2026, Northern received an approved JD from the USACE Rock Island District stating the wetlands at the Clarion compressor station are not a Water of the U.S. and therefore are not federally regulated under Section 404.

Northern will cross one of the 14 identified wetlands via HDD. Additionally, a portion of wetland PRB-W10 will be crossed by HDD to minimize impacts to the wetland. The remaining 13 wetlands will be crossed using open-cut or will be temporarily impacted by TWS, ETWS or a TAR associated with the installation of the pipelines.

Modifications to the FERC Procedures to utilize a 100-foot-wide TWS and have ETWS and staging areas in or within 50-feet of wetlands are discussed in Table 1.3-3, Resource Report 1. Wetland impacts are generally geographically isolated; no individual wetland crossings will be over 0.5 acre of impact, except for wetlands CCS-W01 and CCS-W03 which will require permanent fill for the proposed facility.

For the one wetland and portion of wetland PRB-W10 that will be crossed via HDD, wetland impacts will be limited to foot traffic within six-foot-wide or two three-foot-wide travel lanes. No fill, grading or excavation, mechanical clearing, or vegetative community conversation will occur between the HDD entry or exit points.

2.3.2 Construction and Operation Impacts

Construction Impacts

Northern will complete work near wetlands in accordance with the Plan and its Procedures, with the exception of those areas listed in Resource 1, Table 1.3-3. Northern will avoid and minimize wetland impacts to the maximum extent practicable. Forty-four wetlands were identified within the ESB; Northern designed the Project to avoid 30 wetlands. Additionally, Northern will minimize impacts on an additional wetland by crossing via HDD. Thirteen emergent wetlands will be impacted either by open cut and/or by a TWS, ETWS, or TAR during pipeline construction. Northern will implement the Project SWPPPs to reduce ground disturbance, minimize erosion and sediment run off and promote revegetation within the construction areas. Northern will permanently impact 1.74 acres of emergent wetland as a result of construction of the Clarion compressor station (provided as operational fill in Table 2.3-1); however, the USACE has confirmed these are non-jurisdictional wetlands and no Section 404 permit is required.

Temporary impacts on wetlands within the construction workspace may include the removal of vegetation and disturbance of soils. Construction activities in nearby uplands also may disturb the surface soils and cause subsequent sedimentation from disturbed areas into wetlands. To minimize the potential for sedimentation of wetlands from construction activities, erosion and sediment control measures will be installed prior to or immediately following initial ground disturbance. The erosion control devices will be installed adjacent to wetland boundaries, maintained in working condition throughout construction and will remain in place until the adjacent upland areas are successfully revegetated as specified in Northern's Procedures.

In accordance with its Procedures, Northern will limit impacts on wetlands crossed by open-cut by implementing a 75-foot-wide construction corridor for the Project, with the exception of wetland PRB-W12 and DMS-W03 on the NPPD Princeton Road power station branch line and Des Moines C-line branch line, which will be crossed using a 100 foot-wide TWS (listed in Table 1.3-3). The ETWS located within 50 feet of wetlands are necessary to complete modifications required for the Project at Northern's existing facilities. All ETWS, TARs and staging areas associated with the three pipelines are in compliance with FERC Procedures. Following construction, wetlands that were located in ETWS, TWS and were open cut, or were crossed by a TAR will be allowed to return to their pre-construction state. Northern will follow the Project wetland restoration plan included in Appendix 2C and its associated measures within its Procedures to avoid or minimize impacts on wetlands.

Soil compaction will be minimized by limiting equipment operation in wetlands and installing temporary equipment mats, as necessary. To prevent soil mixing in unsaturated wetlands, up to 12 inches of topsoil will be removed from directly over the trench and stockpiled for restoration as close as feasible to its original horizon. Northern also will attempt to segregate wetland topsoil or vegetative mass in mucky or inundated wetlands to replenish the native seed bank during restoration. For wetlands crossed via the push-pull method, Northern will install the pipeline a minimum of four feet below the benthic soil surface.

Northern will install trench plugs at the entrance and exit of the pipeline trench through the wetland. Any confining layers that are breached during construction will be restored during backfilling. Northern will restore contours to pre-construction levels and remove temporary erosion control measures.

Wetland crossings completed via HDD will minimize the potential for wetland impacts resulting from erosion, sedimentation and/or excess turbidity by avoiding surface disturbance in and immediately adjacent to the wetlands. In the event of an inadvertent release, Northern will implement the HDD Plan, which includes procedures for monitoring, detection, isolating, stopping, and clean-up of inadvertent releases, as well as making necessary agency notifications.

Permanent erosion control devices will be installed during restoration and may include slope breakers, interceptor diversion devices, and/or vegetation cover in adjacent upland areas to minimize long-term sedimentation into the wetlands. Energy dissipation devices may be installed at the down-slope end of surface water diversion devices to prevent erosion off the ROW into wetlands.

The SPCC plan provides restrictions and mitigation measures to limit potential impacts associated with the release of fuels, lubricants or other potentially toxic materials used during routine construction. Refueling and storage of hazardous materials will be prohibited within 100 feet of wetlands during construction, unless otherwise approved by FERC.

After the completion of construction of the Project components, wetland areas will generally be allowed to revegetate naturally or seeded per applicable permit requirements. Emergent wetlands, dominated primarily by low-growing sedges, rushes and other herbaceous vegetation, will revert to pre-existing conditions within one to two growing

seasons following construction of the Project components, resulting in no permanent impacts on these wetland types. In accordance with its Procedures, Northern will monitor vegetation within wetlands annually for three years or until vegetation has been considered successful. Northern will restore wetlands to their pre-existing condition, to the extent practicable, thereby restoring the wetland function.

Operational Impacts

During operation, Northern will not conduct routine removal of vegetation between the HDD entry and exit points in riparian or wetland areas. Additionally, Northern will refrain from ROW maintenance and mowing operations within 25 feet of a riparian or wetland boundary crossed by HDD. No permanent conversion of wetland communities will occur as a part of the Project.

For safety purposes, a 10-foot-wide corridor centered above the proposed pipeline through wetlands will be maintained in a state of emergent vegetation. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of the pipeline coating will be selectively cut and removed. Routine vegetation maintenance will not be conducted within wetlands that are crossed via HDD. A total of nine wetlands will be impacted by operation of the Project. Refer to Table 2.3-1 for operational impact details.

2.4 AGENCY CONSULTATION

On September 30, 2025, Northern submitted a request to the USACE Omaha District for Project planning purposes, to determine if the Project would impact any known civil works projects regulated under Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408). The USACE responded on October 11, 2025, stating the project will not result in alterations to, or temporarily or permanently occupy or use, any US Army Corps of Engineers (USACE) federally authorized Civil Works project under Section 408 within the Omaha District. Furthermore, the Omaha District representative forwarded the request to the Kansas City District for like review and response. No response from the Kansas City District was received. Based on review of the USACE Civil Works Map, no Project components cross civil works projects that would require a permit under Section 408.

On March 19, 2026, Northern submitted a jurisdictional determination (JD) request to the USACE Rock Island District for review of federally regulated wetlands identified within the Clarion compressor station ESB. The USACE responded on March 23, 2026 (CEMVR-RD-2026-0273), confirming the Clarion compressor station Project component does not occur within a water of the U.S. (WOTUS), and therefore, does not require a USACE Section 404 permit.

Based on coordination between Northern and the USACE Omaha District via record of communication on March 16, 2026, Northern will submit PCN applications to the USACE Omaha District under Nationwide Permit (NWP) 12 (Utility Line Activities) for the Omaha 3rd branch line loop and NPPD Princeton Road power station branch line in April 2026. The USACE also stated that based on the description of work proposed at the Platte River crossing, no individual Section 401 Water Quality Certification from the state would be required, unless impacts to threatened and endangered species or eastern saline wetlands would occur as a result of the Project.

Northern will not submit a notification to the USACE Rock Island District for temporary wetland impacts associated with the Des Moines C-line branch line because this Project component meets the "no notification required" conditions under NWP 12. No other Project components in Nebraska or Iowa will impact wetlands or waterbodies. Documentation of agency consultations is provided in Appendix 2D.

Northern will coordinate with applicable state and local agencies regarding potential impacts to water resources subject to state and local regulation, including NRDs, the NDWEE, the IDNR, and applicable WMAs. Northern will provide FERC with records of additional agency coordination, as applicable, through supplemental filings.

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Resource Report 2
Figures

Figure 2-1
NWI Wetlands

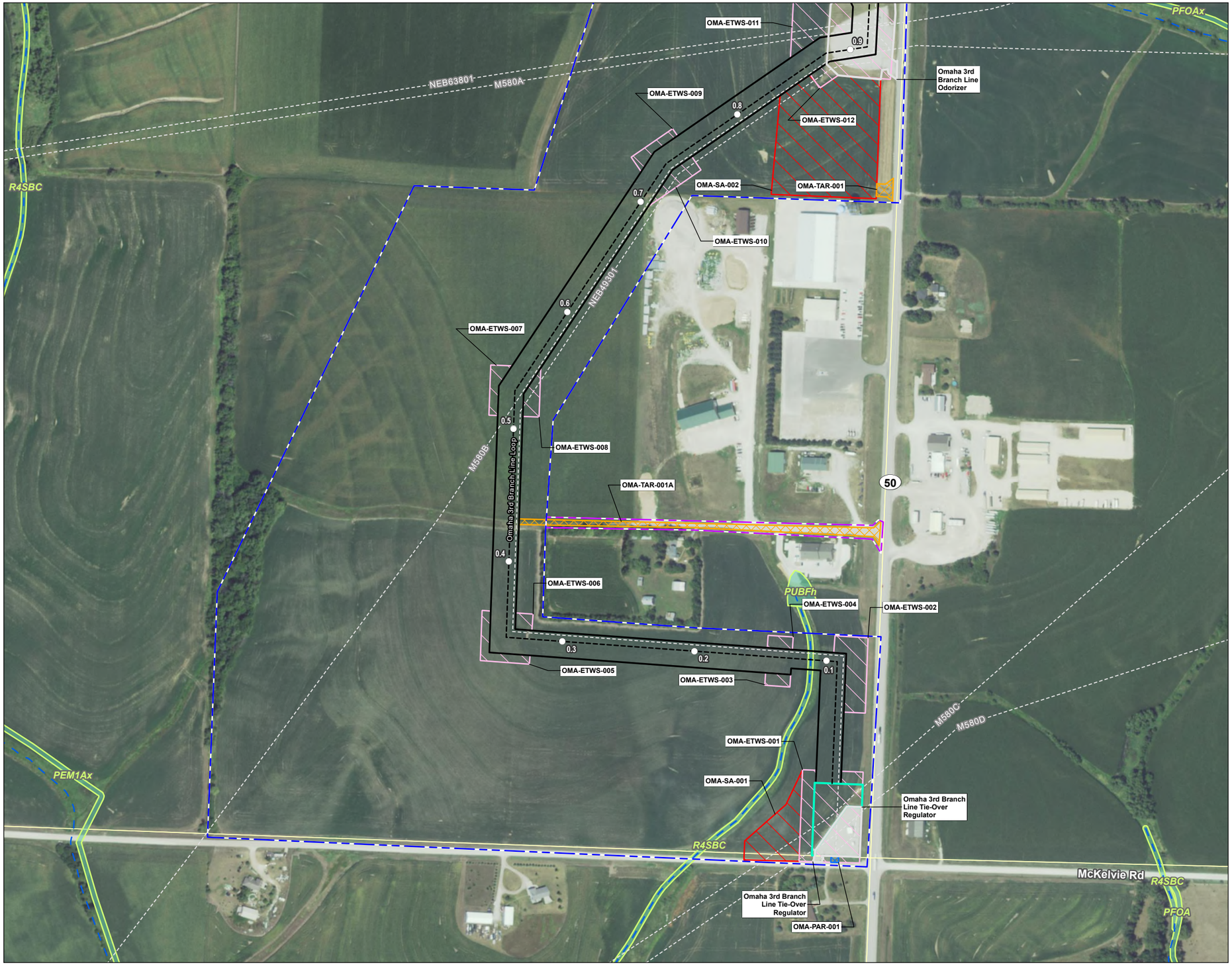


Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

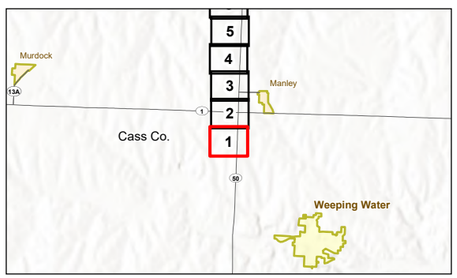
Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec
Northern Natural Gas

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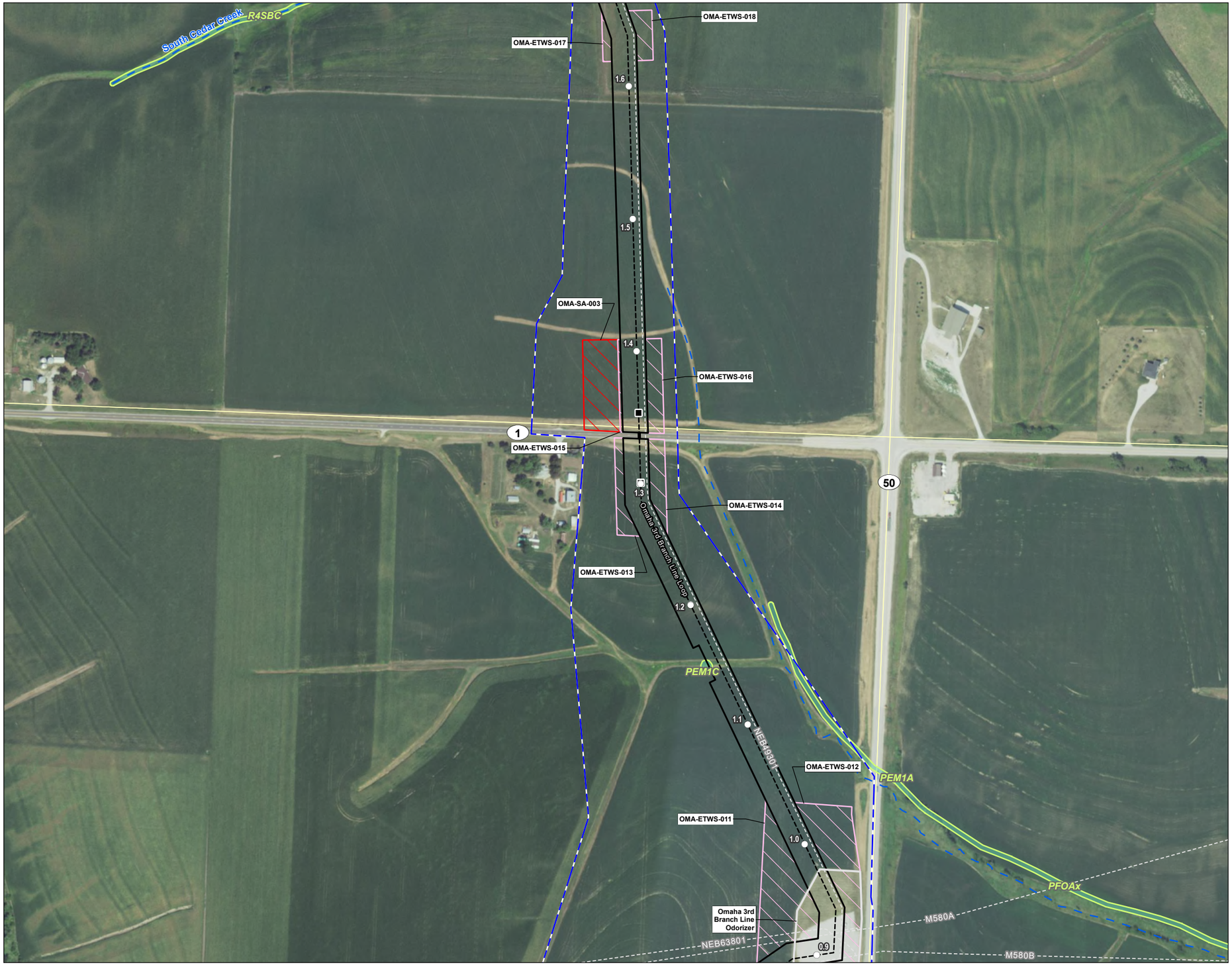


Figure No.

2-1

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

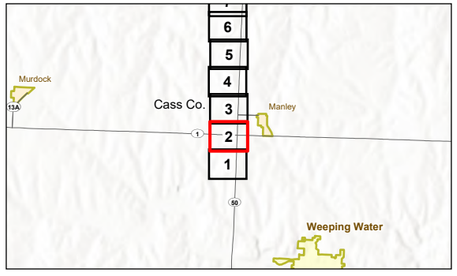
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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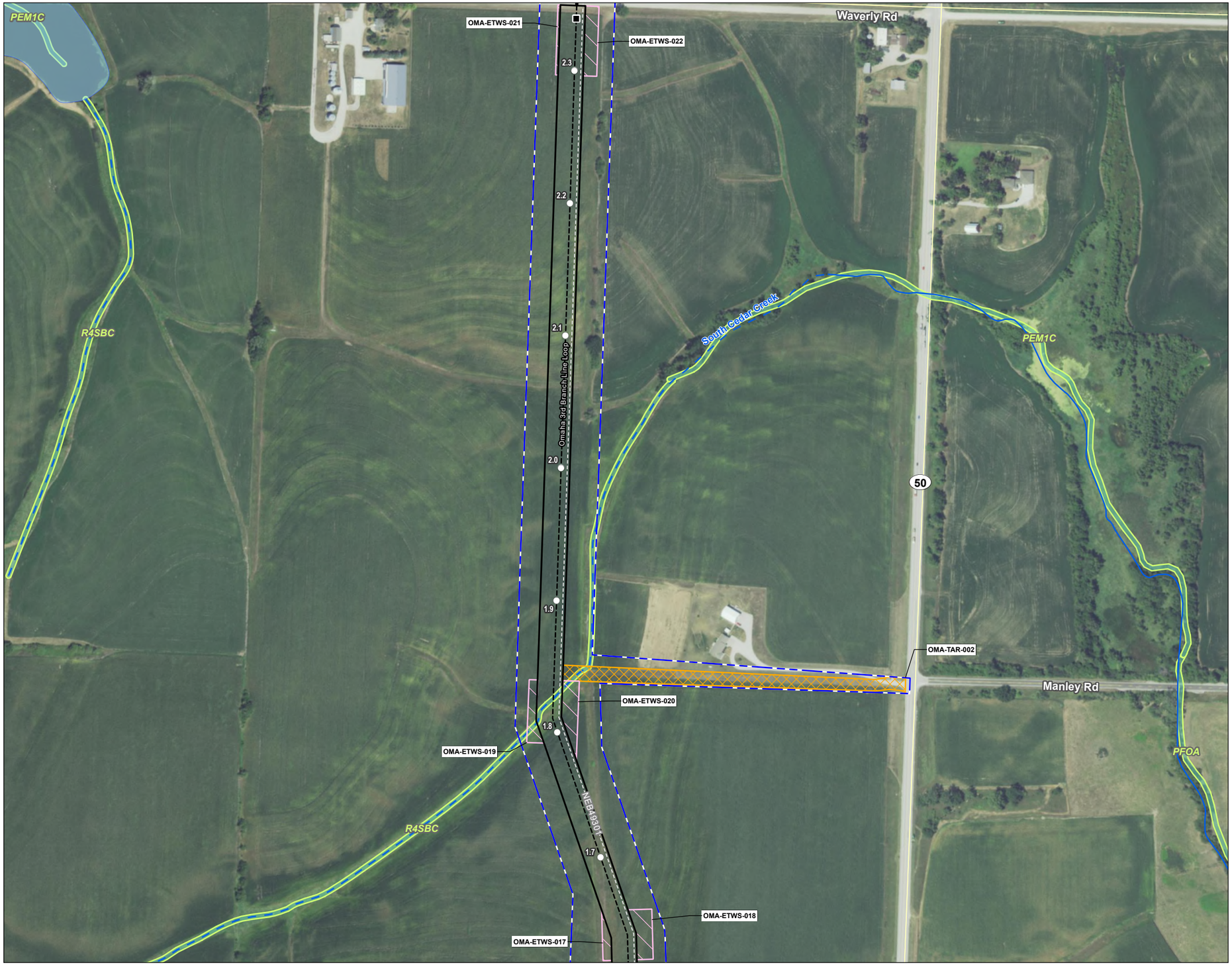

Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
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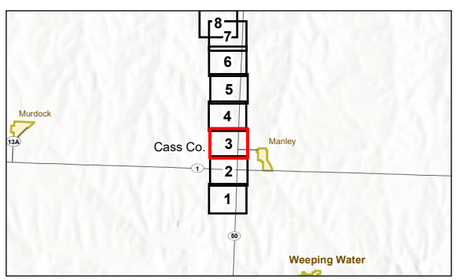
- Temporary Access Road
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec
Northern Natural Gas

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2-1

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
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- National Wetlands Inventory Feature

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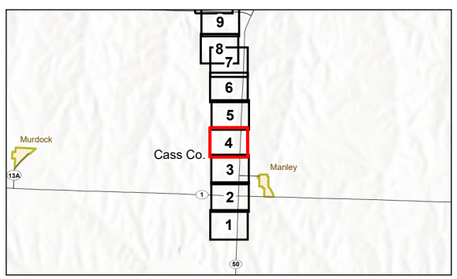

Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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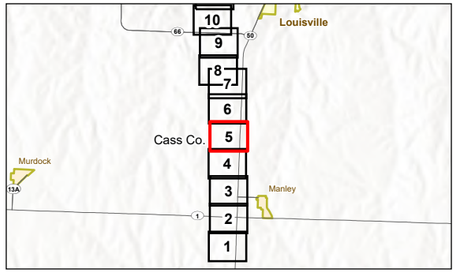
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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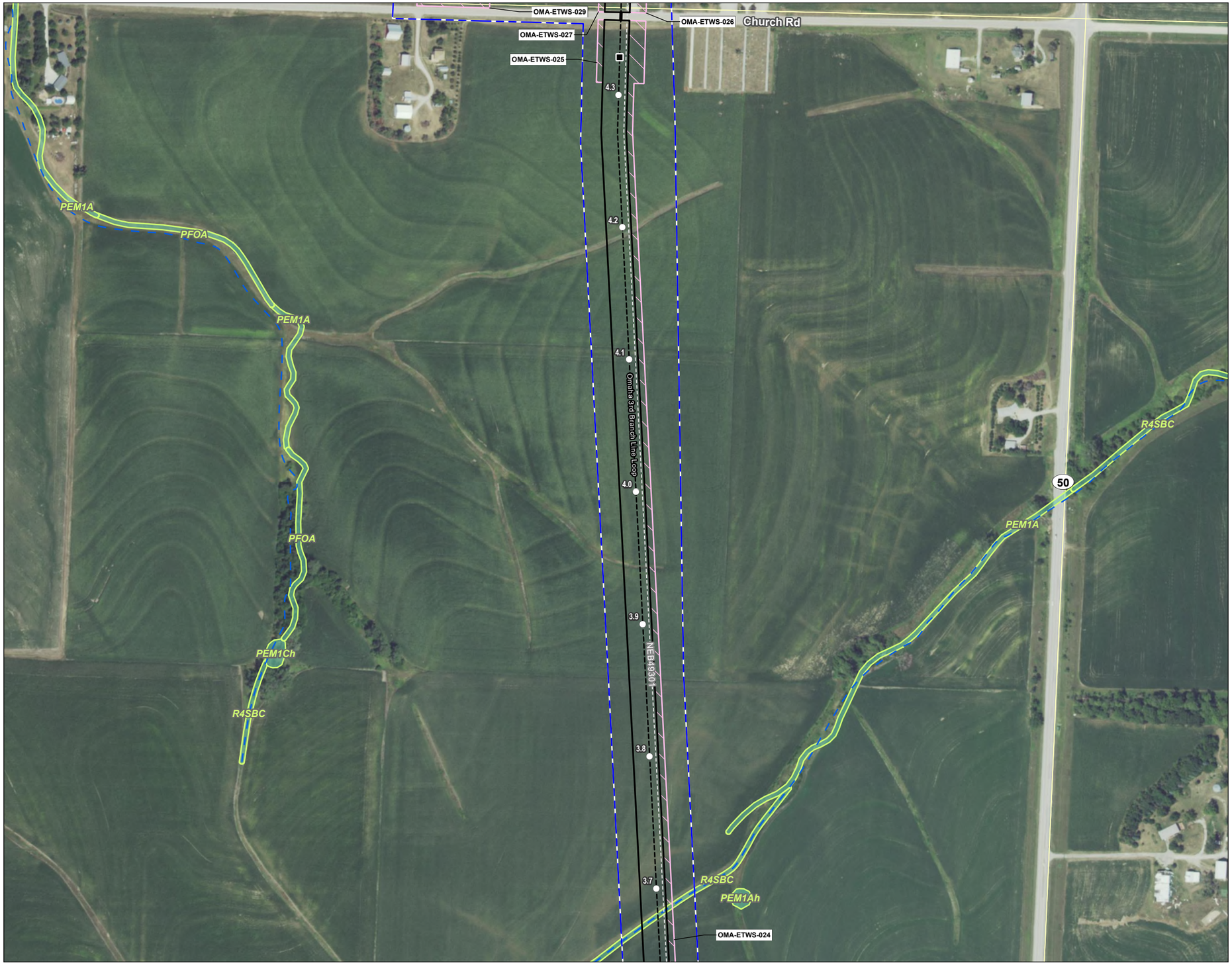

Figure No.

2-1

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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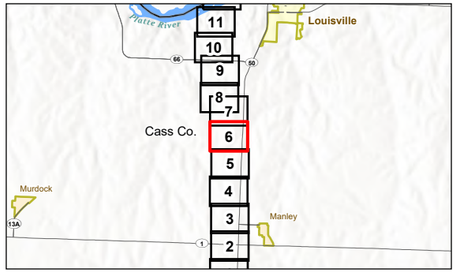
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

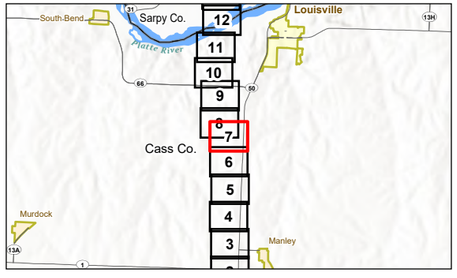
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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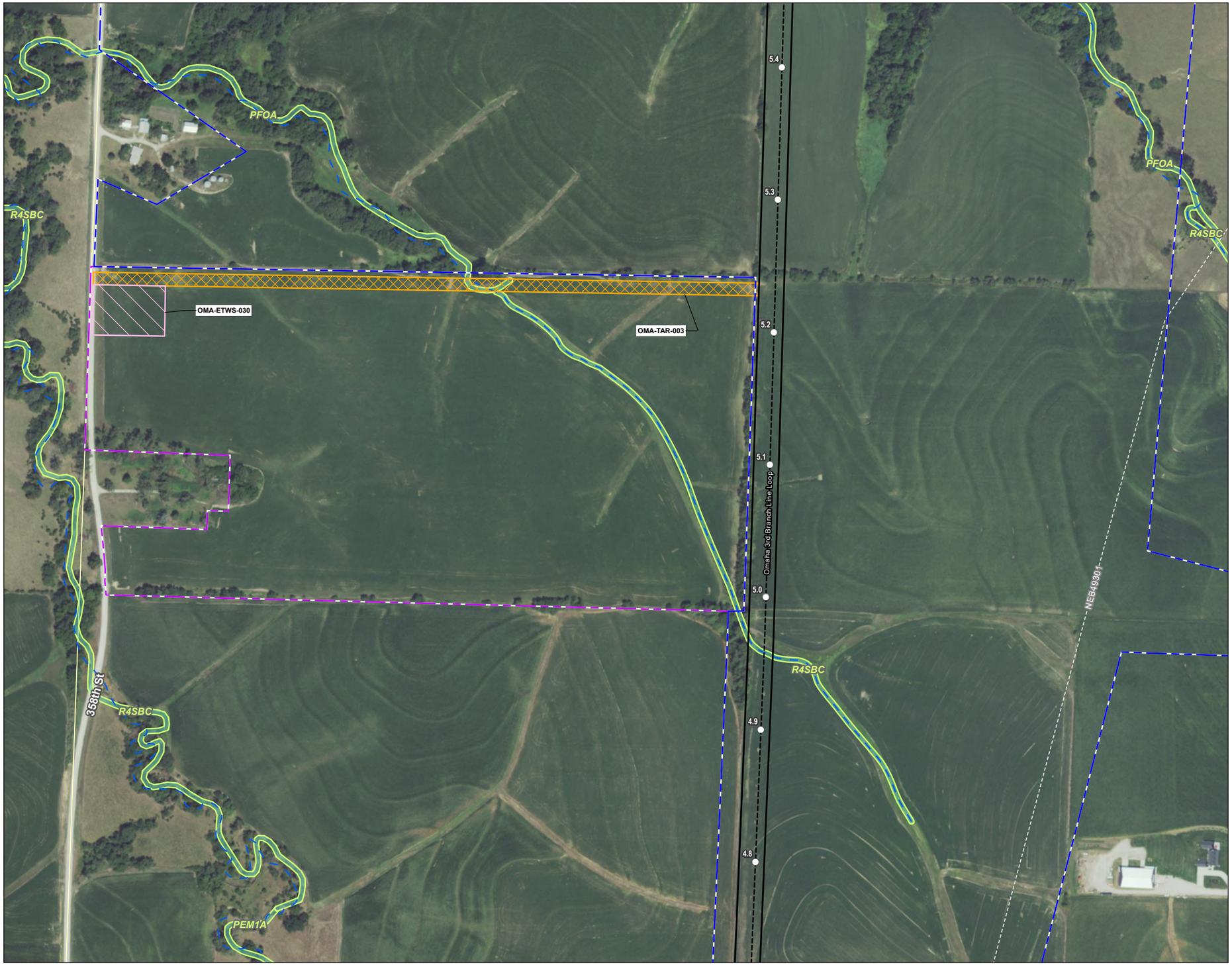

Figure No.

2-1

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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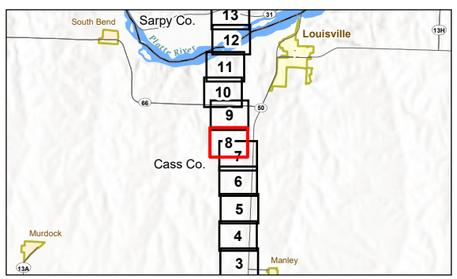
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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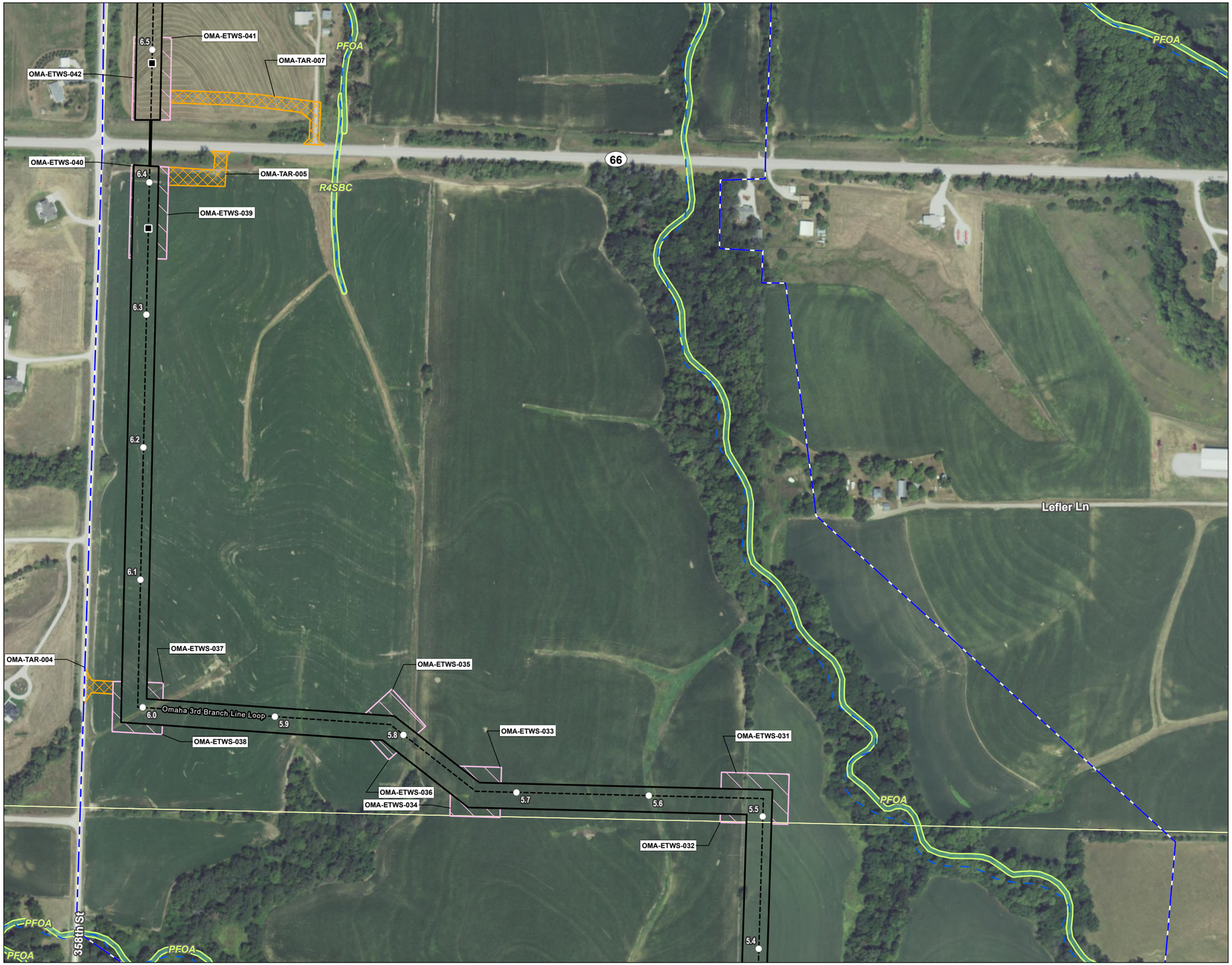

Figure No.

2-1

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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Legend

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National Hydrography Dataset

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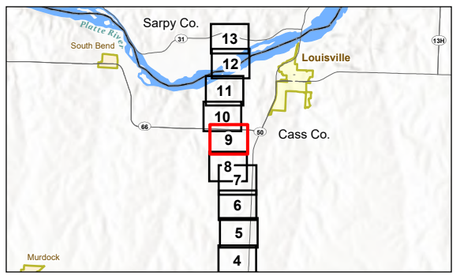

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Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
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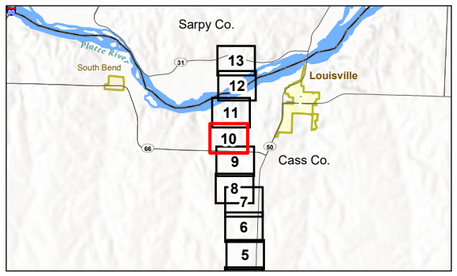

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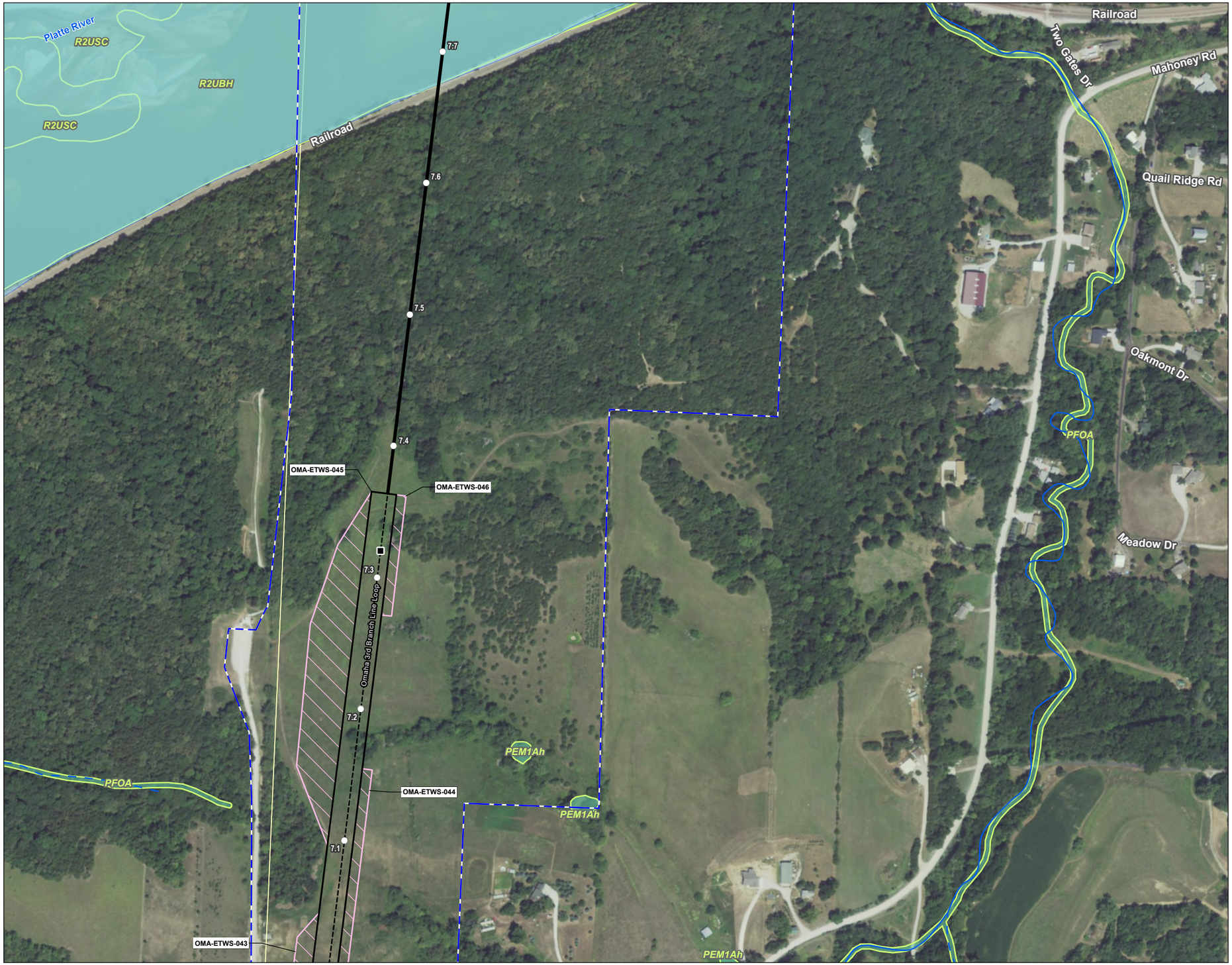

Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
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Cass County, Nebraska

Prepared by JM on 2026-02-09
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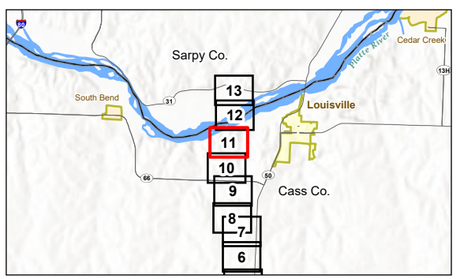

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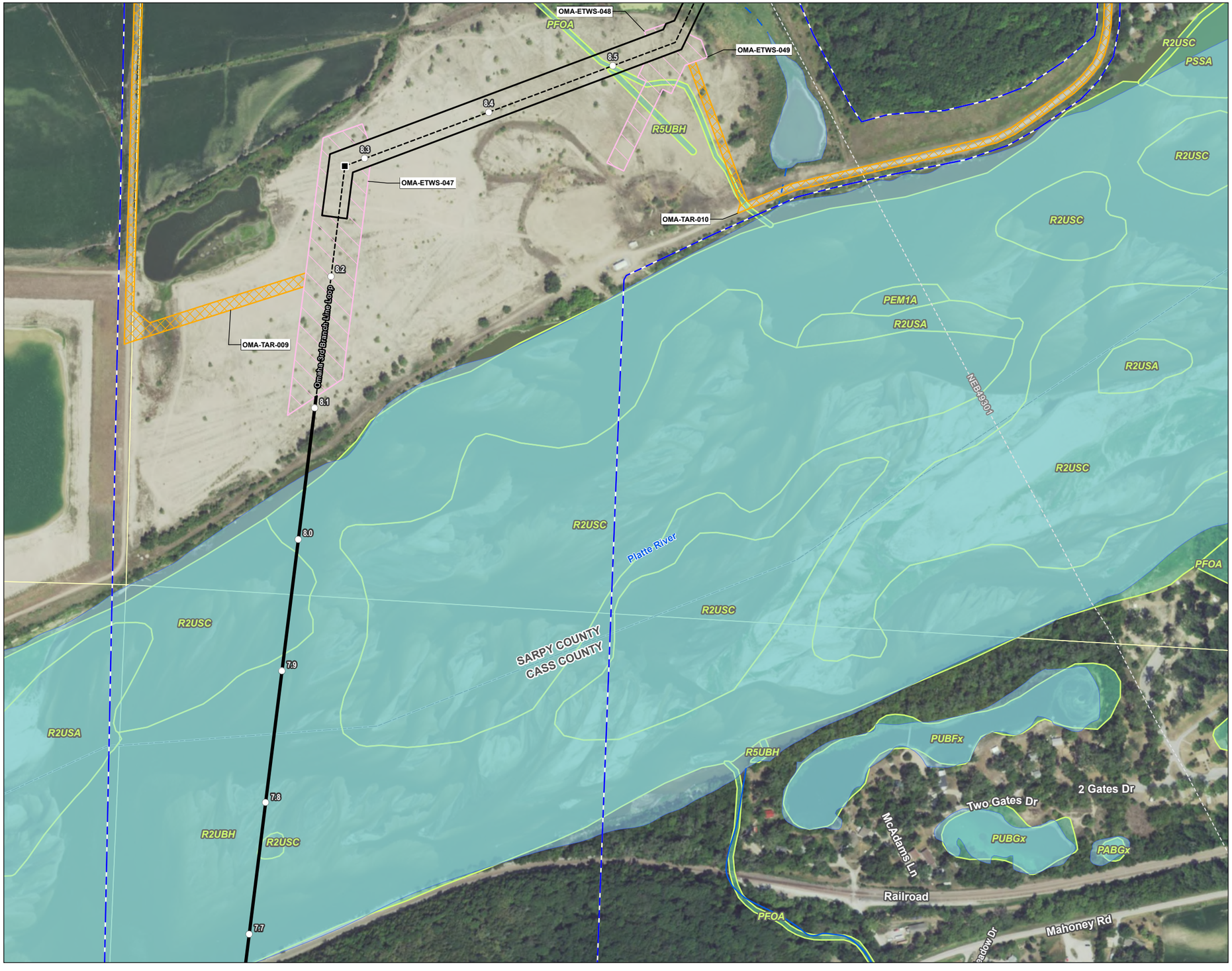

Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy & Cass Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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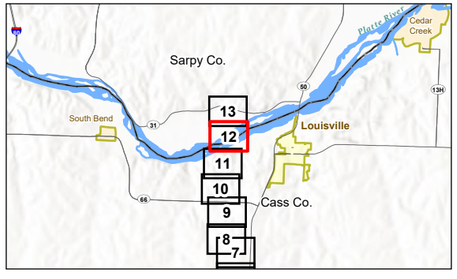

Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.
2-1

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy County, Nebraska

Prepared by JM on 2026-02-09
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IR by SK on 2026-03-23

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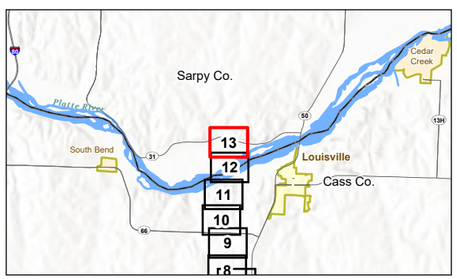

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Stantec
Northern Natural Gas

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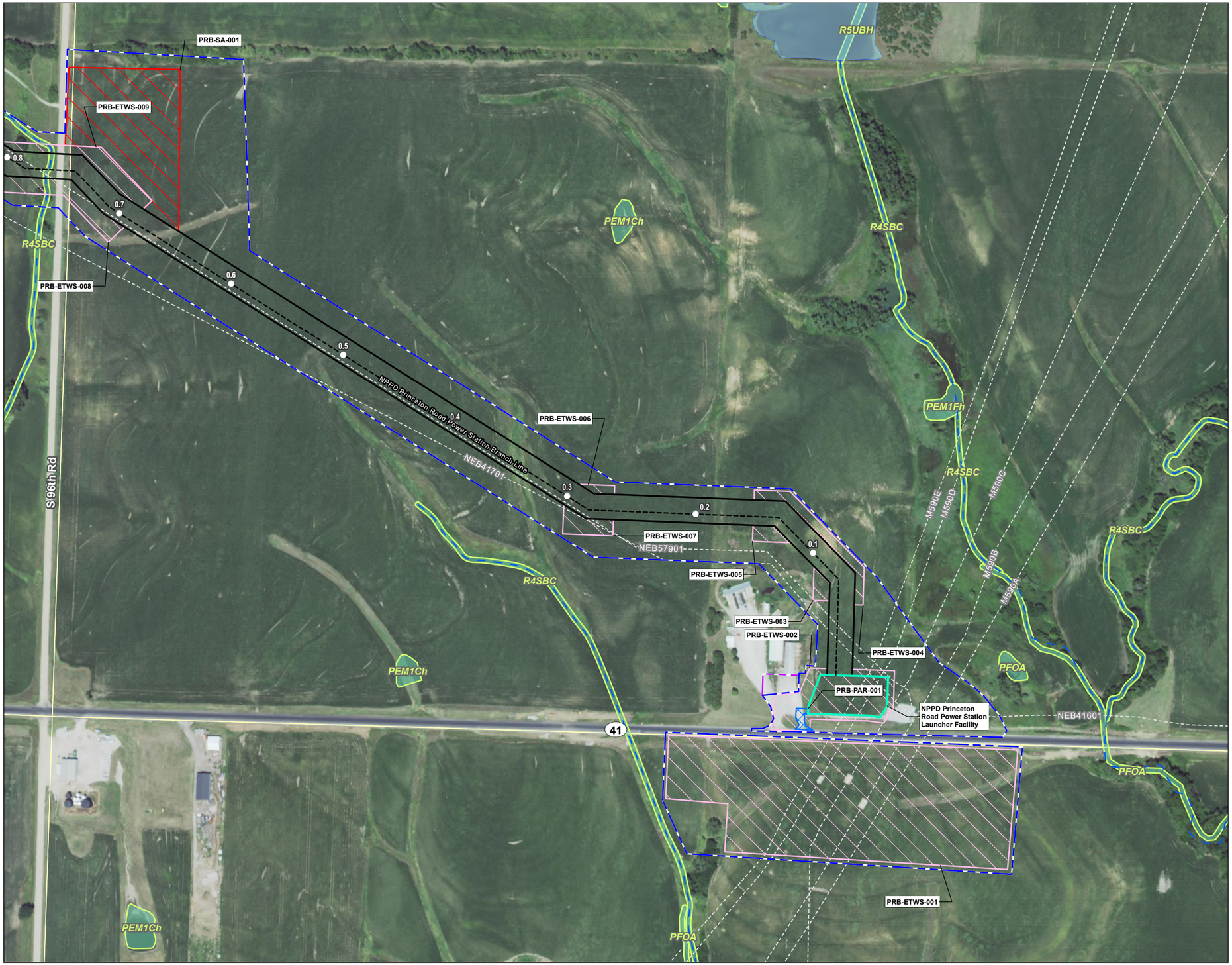


Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

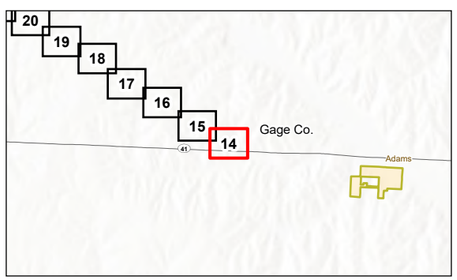
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
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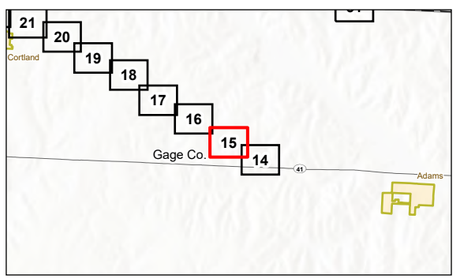
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

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Figure No.

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Title

National Wetlands Inventory
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
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- HDD
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- Extra Temporary Workspace
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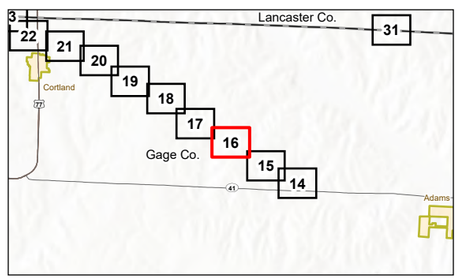
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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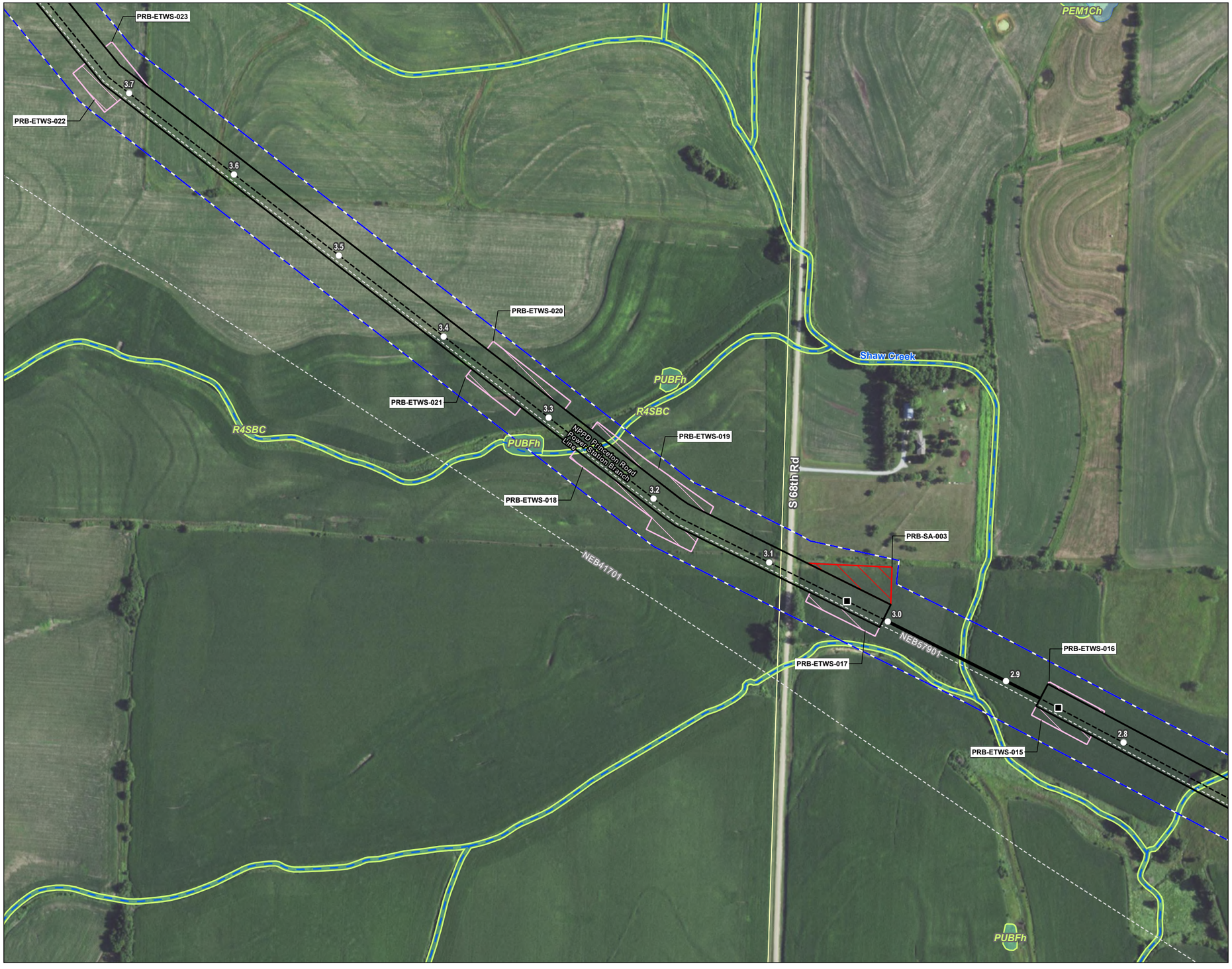

Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
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- Proposed Pipeline
- Existing Pipeline
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- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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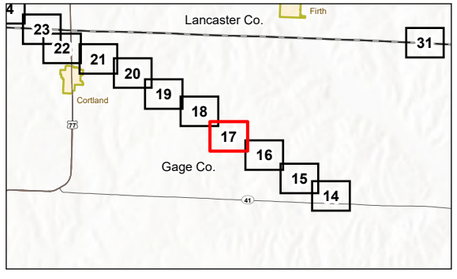

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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- Proposed Pipeline
- Existing Pipeline
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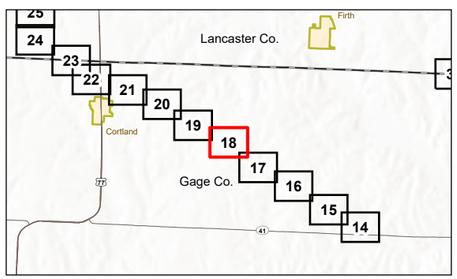
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
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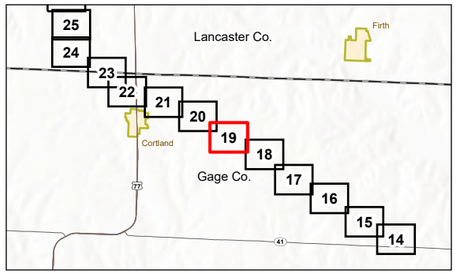
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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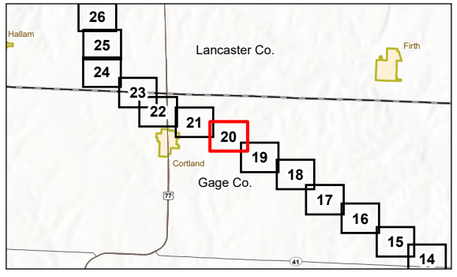
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

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Northern Natural Gas

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Figure No.
2-1

Title
National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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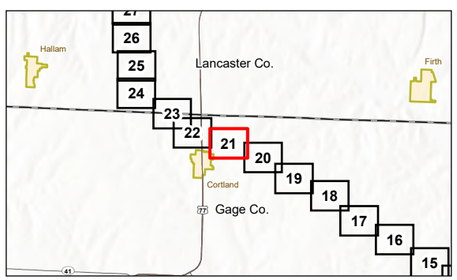
Legend
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

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Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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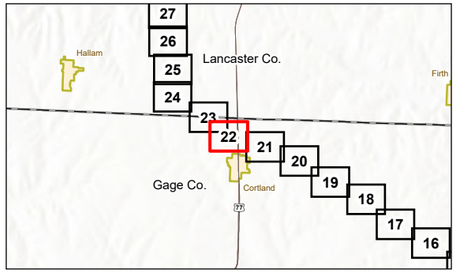
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
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- Staging Area
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- Perennial Stream
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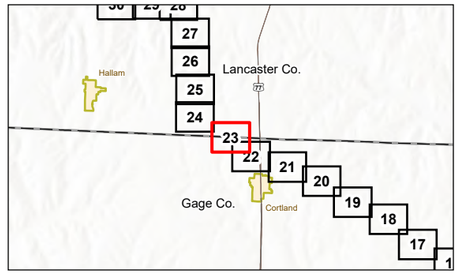

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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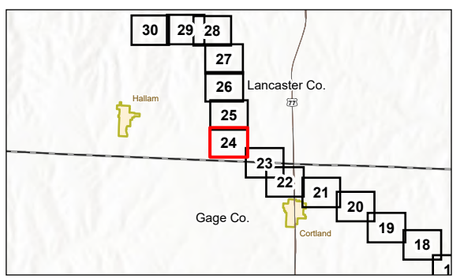

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
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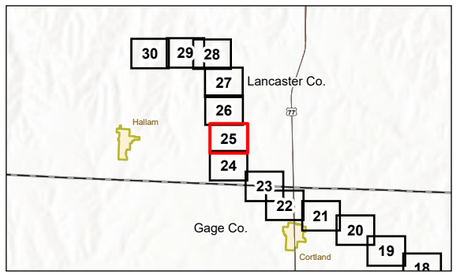

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Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
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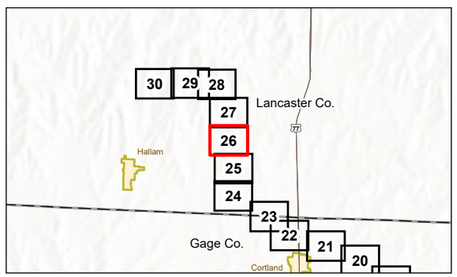

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Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

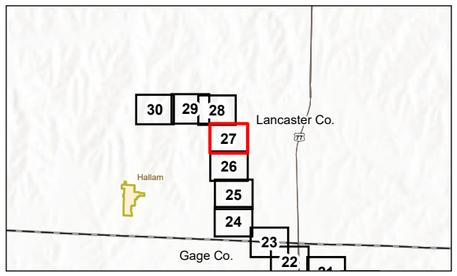
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

Revised: 2026-03-26 By: jmarty
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Figure No.
2-1

Title
National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

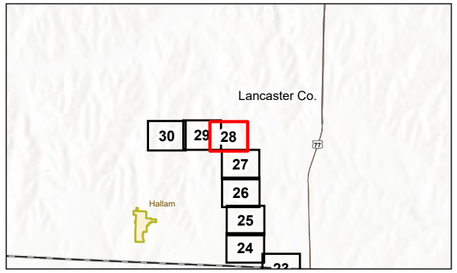
Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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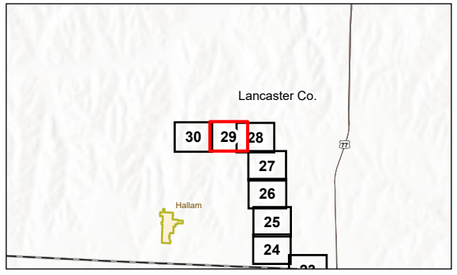
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

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Figure No.

2-1

Title

National Wetlands Inventory NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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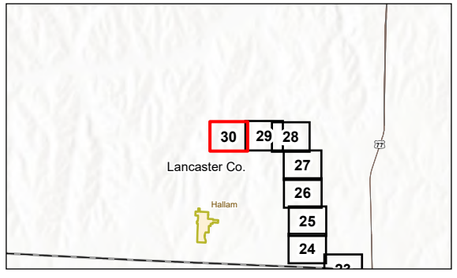
Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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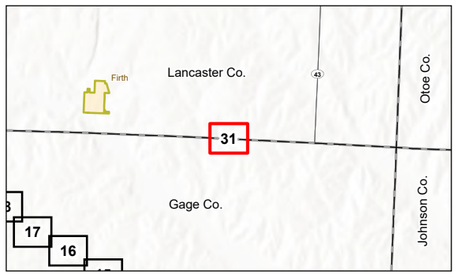
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

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Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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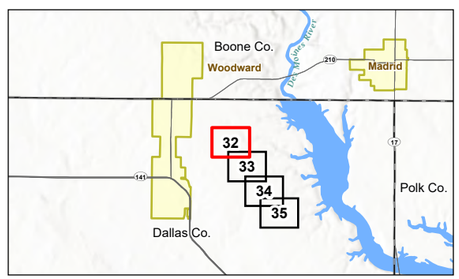
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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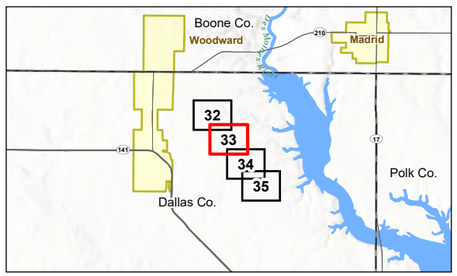
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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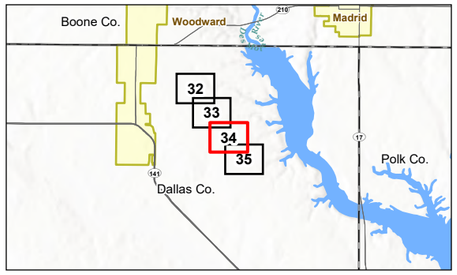
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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3. Background: NAIP 2023

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Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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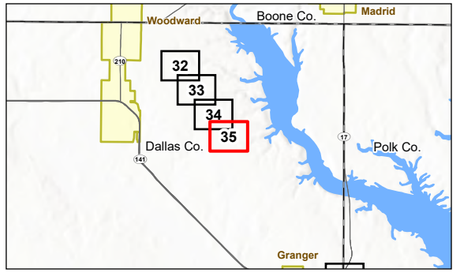
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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3. Background: NAIP 2023

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Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line South Loop Uprate - Royal Estates Reducing Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Townships of Grant & Jefferson
Dallas & Polk Counties, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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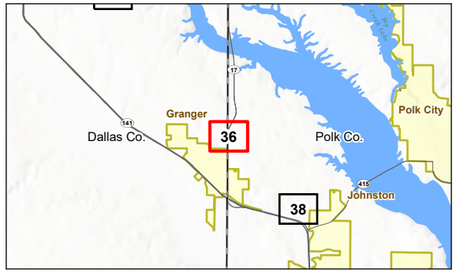
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

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Northern Natural Gas

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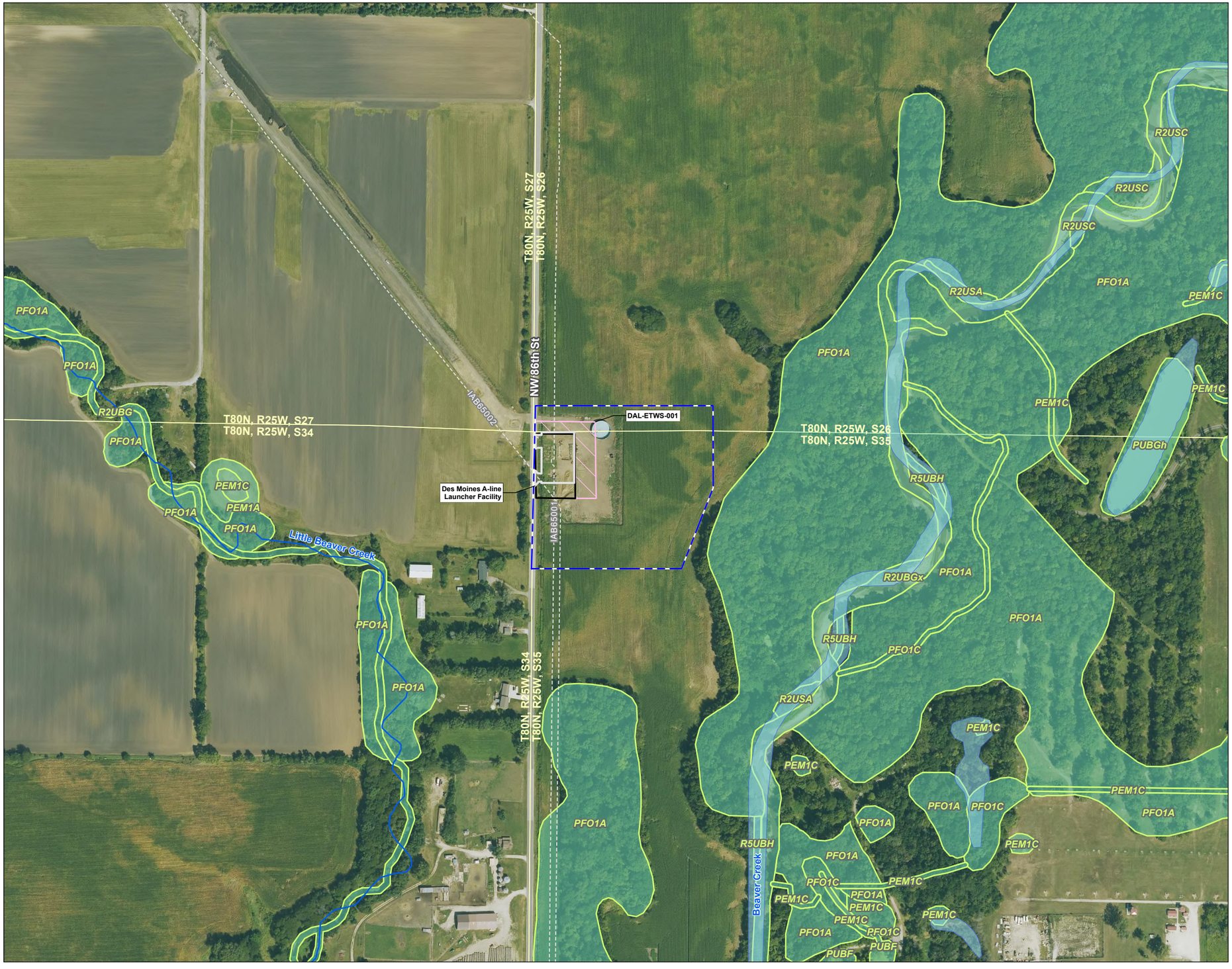

Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line South Loop Uprate - Des Moines A-line Launcher Facility

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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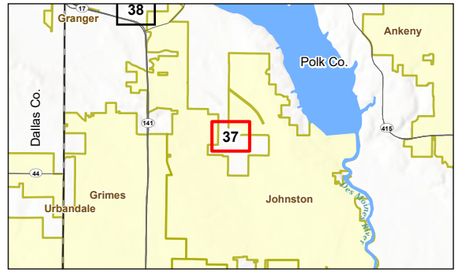
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Des Moines C-Line South Loop Uprate - Grimes Iowa TBS

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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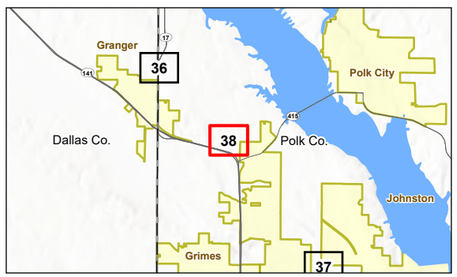
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.
2-1

Title
National Wetlands Inventory
Clarion Compressor Station

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Lake
Wright County, Iowa

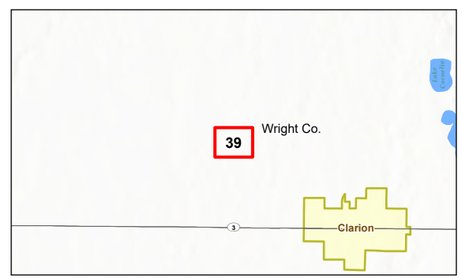
Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

Stantec
Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Beatrice Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Riverside
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

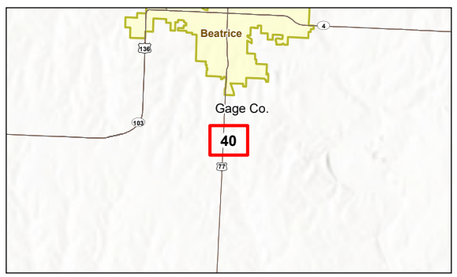
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Gutherie Center Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Bear Grove
Gutherie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

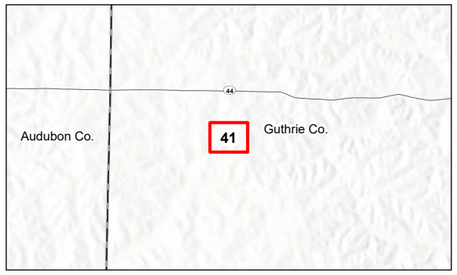
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

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Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Oakland Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Center
Pottawattamie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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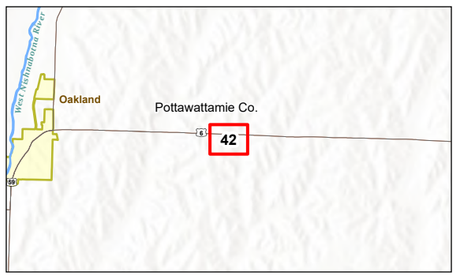
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-1

Title

National Wetlands Inventory
Ogden Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Yell
Boone County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

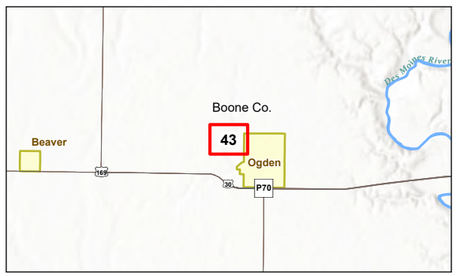
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.
2-1

Title
National Wetlands Inventory
Palmyra Compressor Station

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of North Palmyra
Otoe County, Nebraska

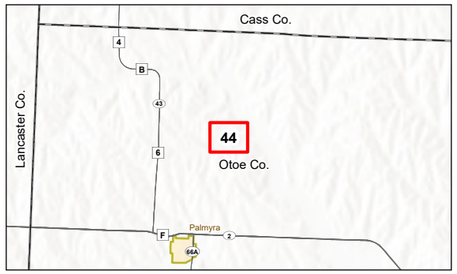
Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Revised: 2026-03-26 By: jmarty
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Figure 2-2
Field Delineated Wetland and Waterbodies

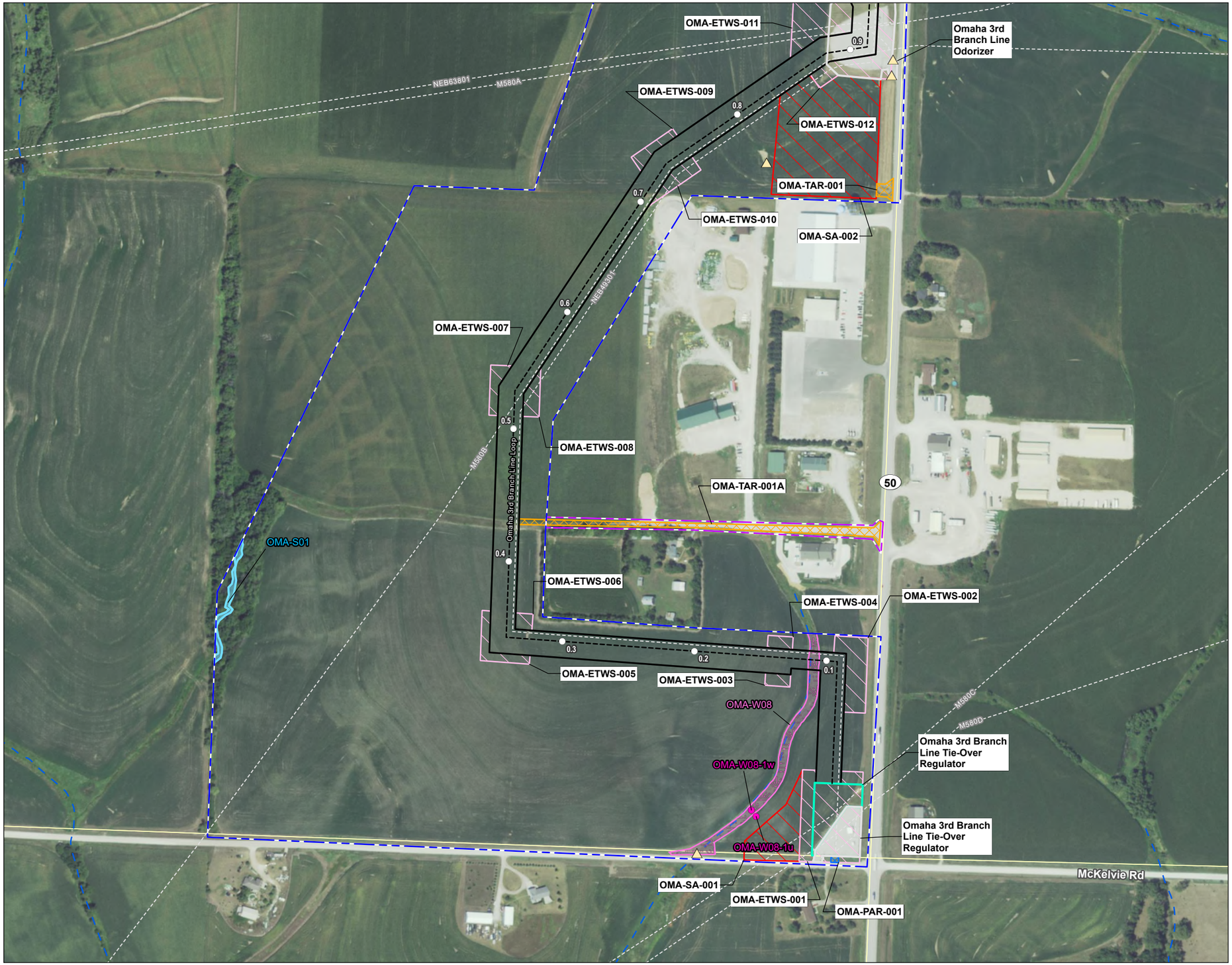


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet

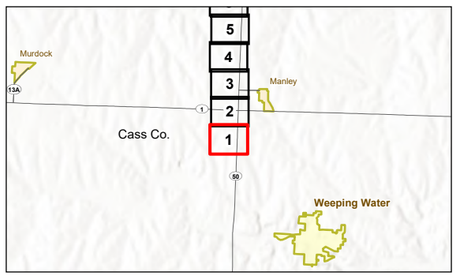
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

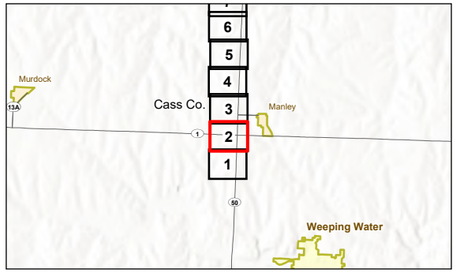
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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3. Background: NAIP 2022

Stantec

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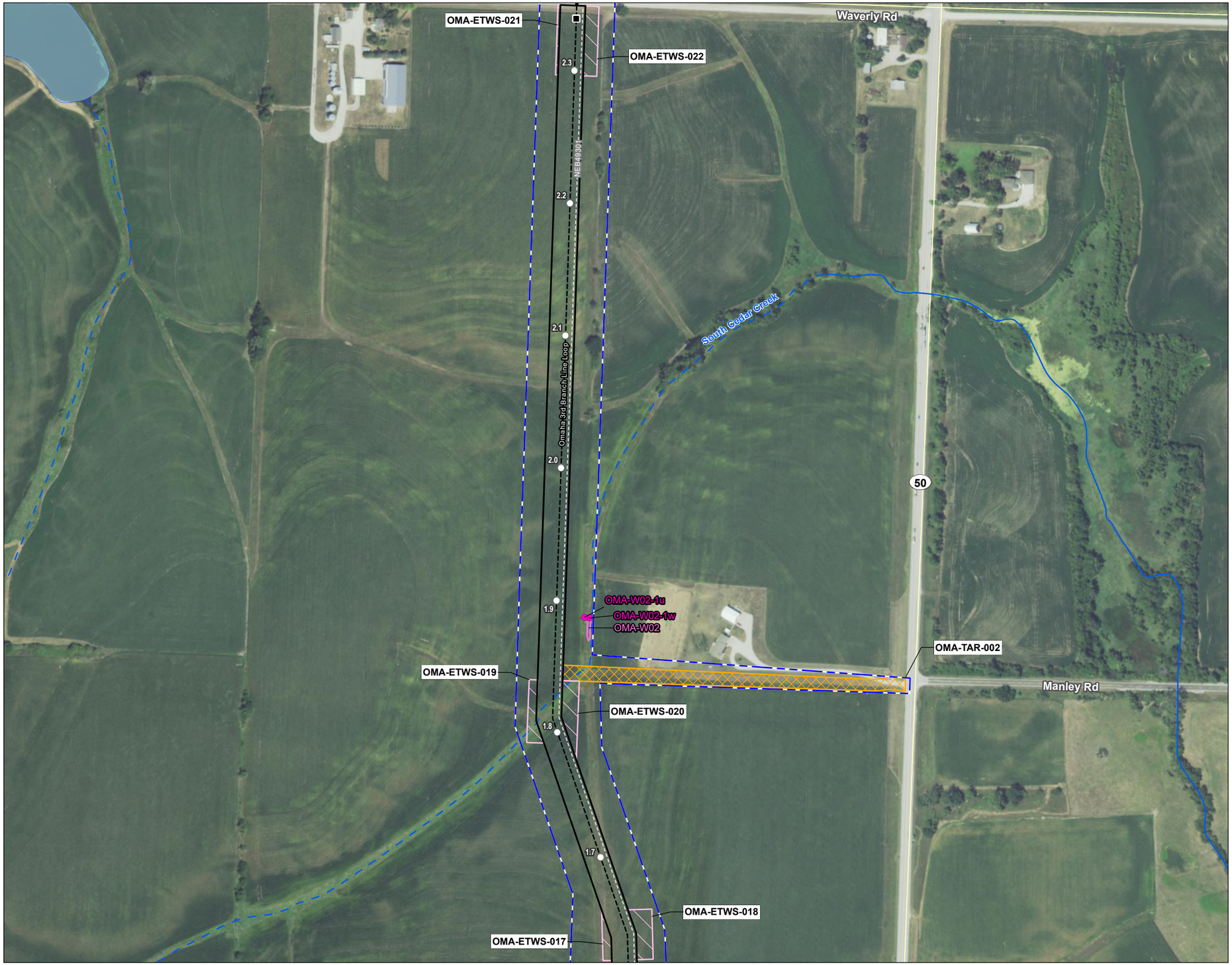


Figure No.
2-2

Title
Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

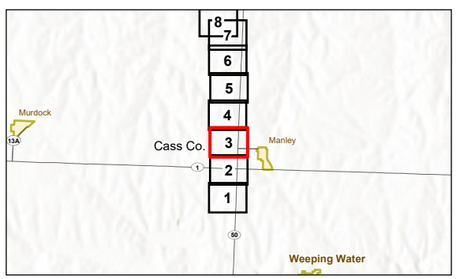
Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec
Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

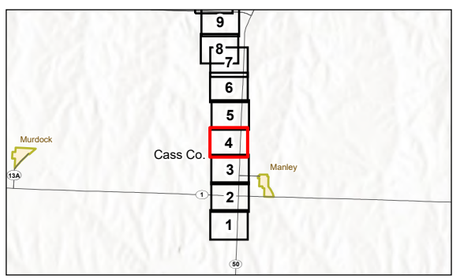
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

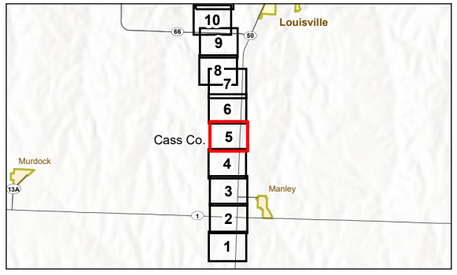
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Stantec

Northern Natural Gas

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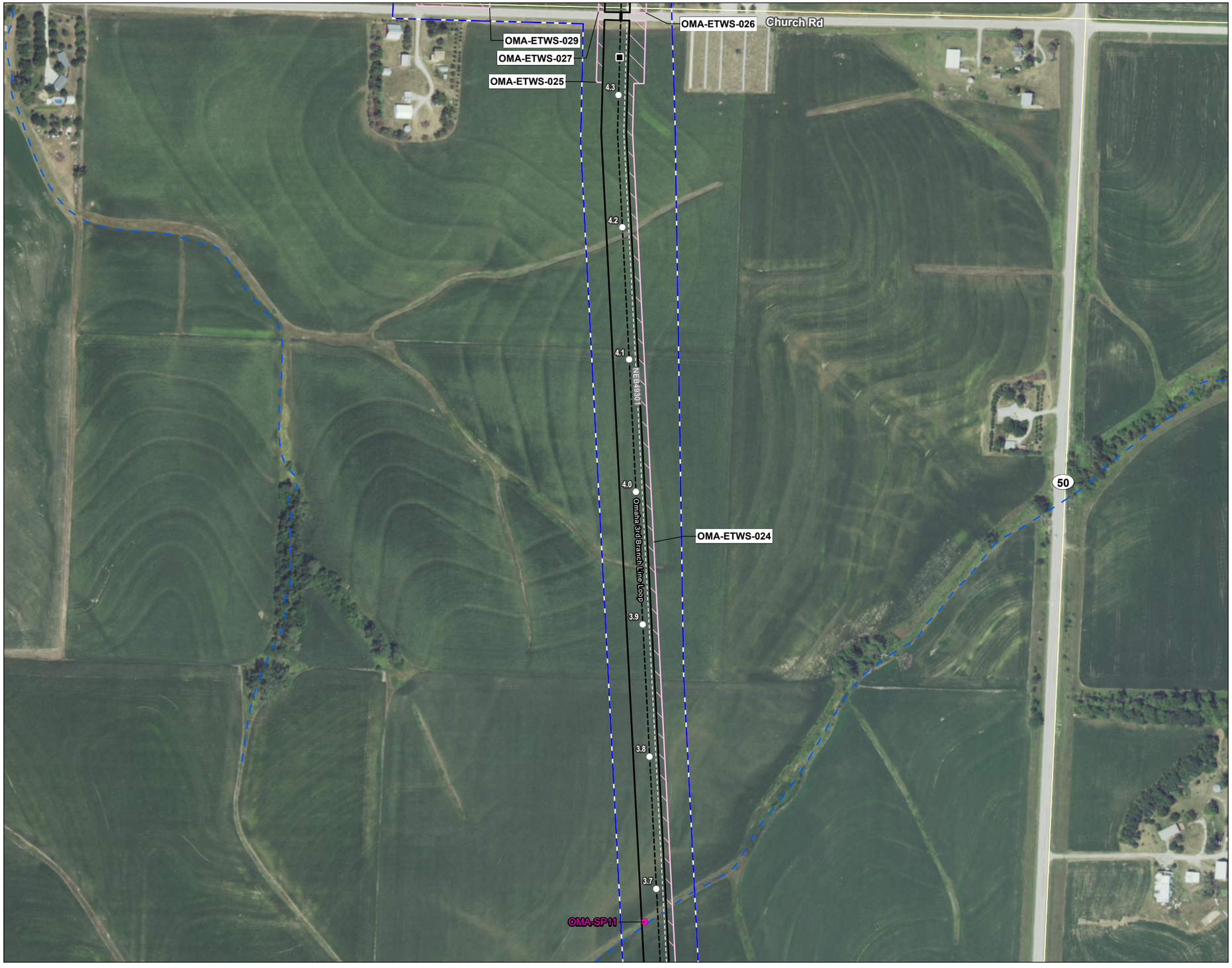


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

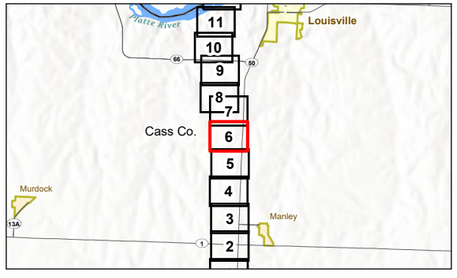
Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Sample Point

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

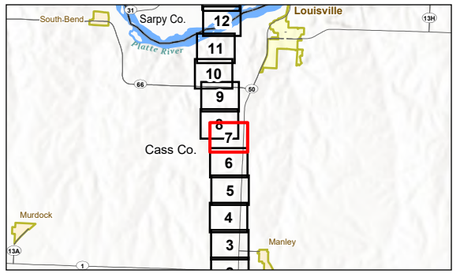
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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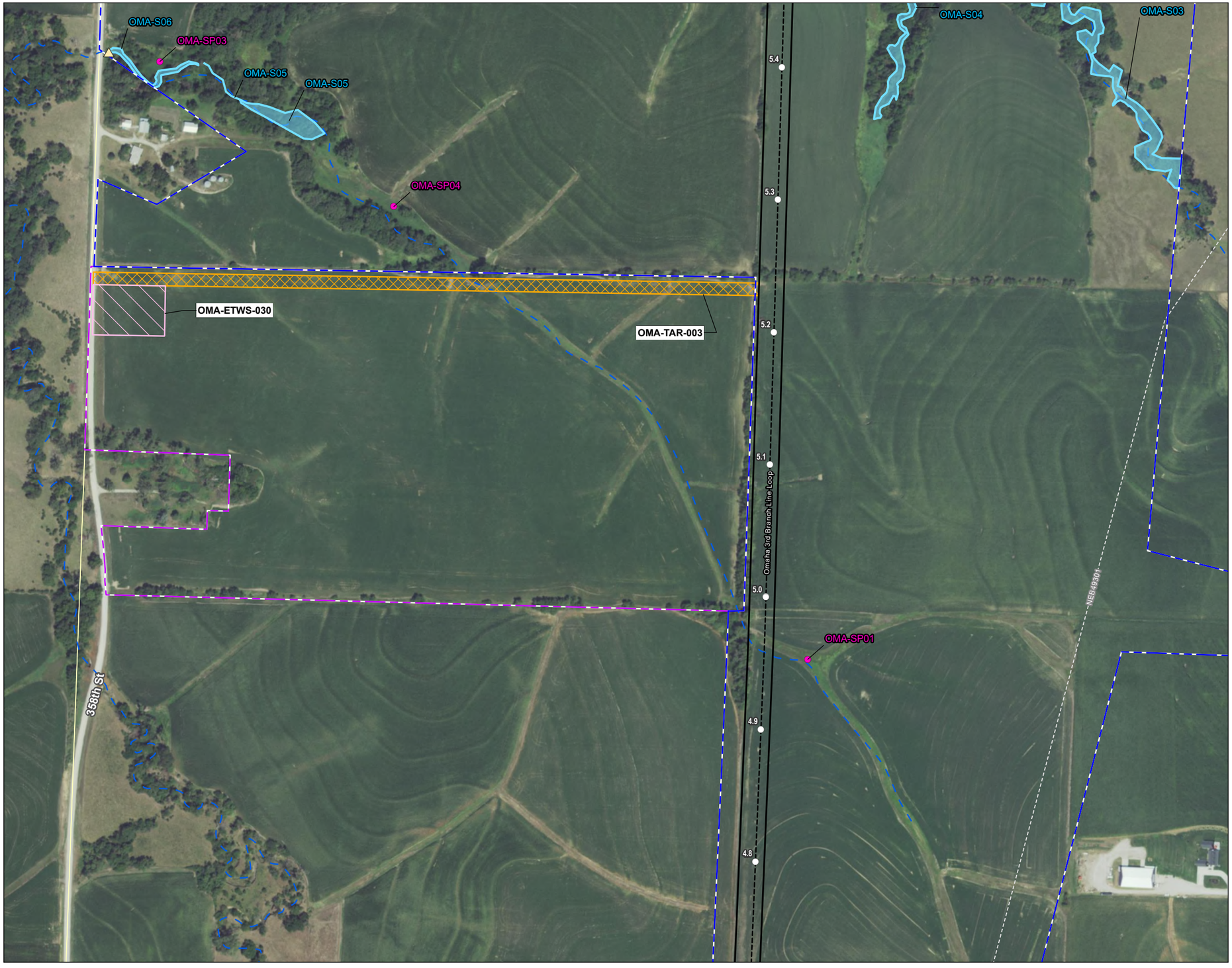

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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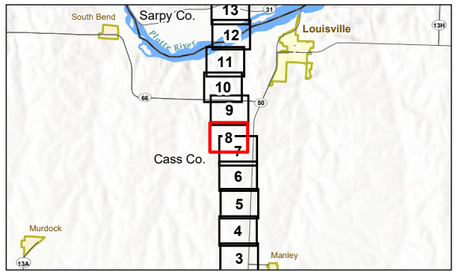
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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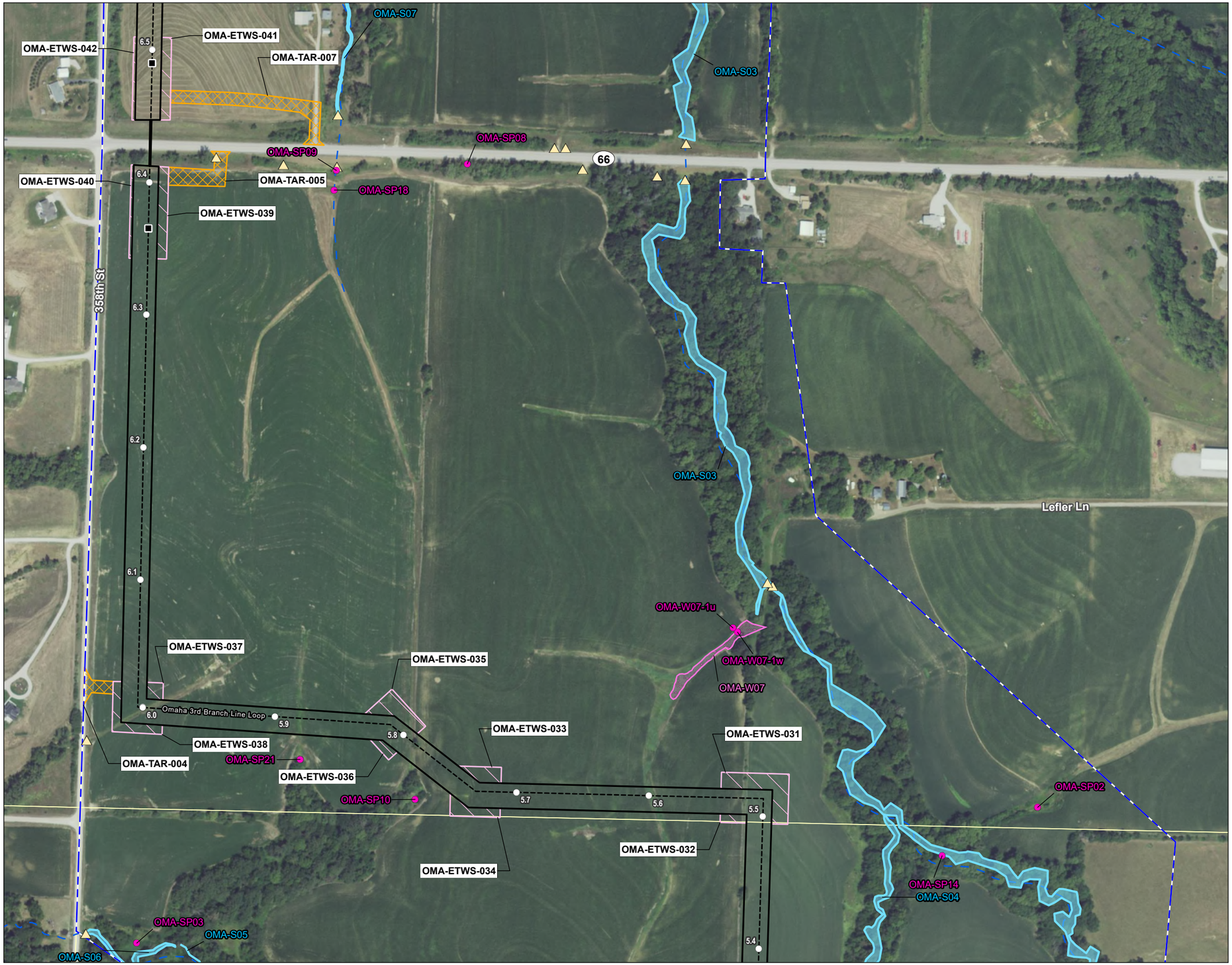


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

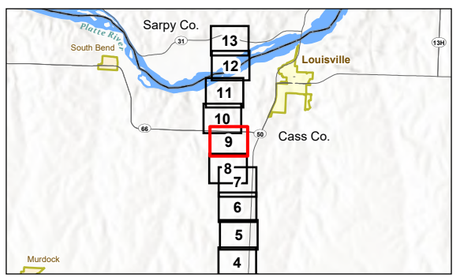
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project

172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location

Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet

(At original document size of 11x17)
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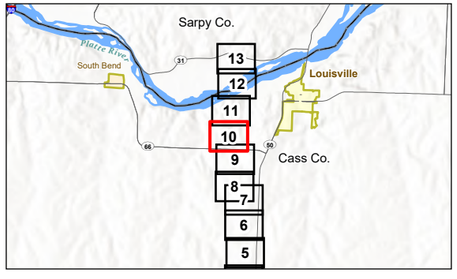
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Open Water

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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Northern Natural Gas

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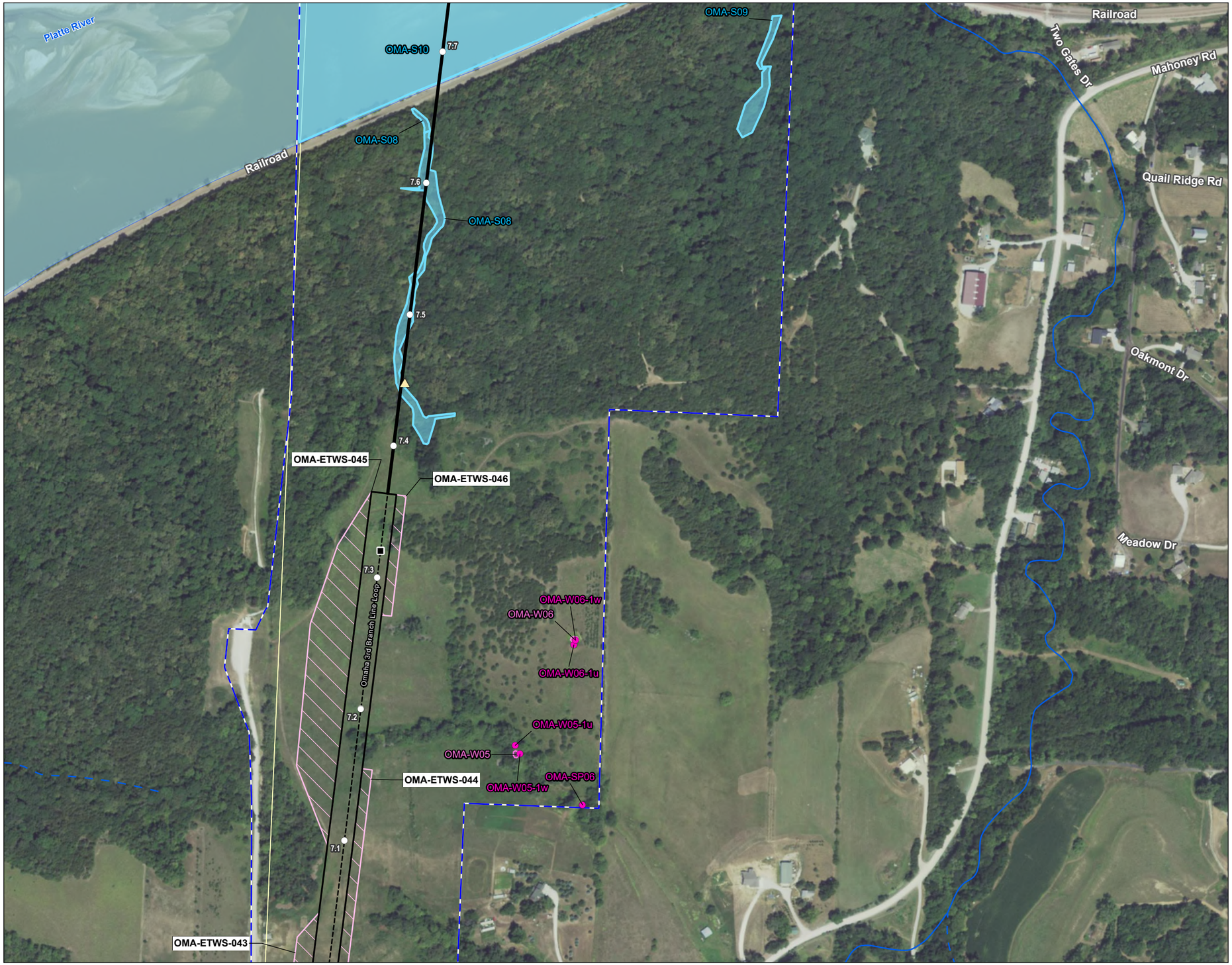

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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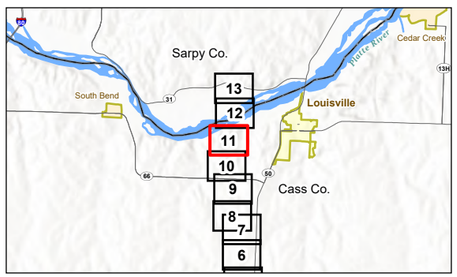
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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Northern Natural Gas

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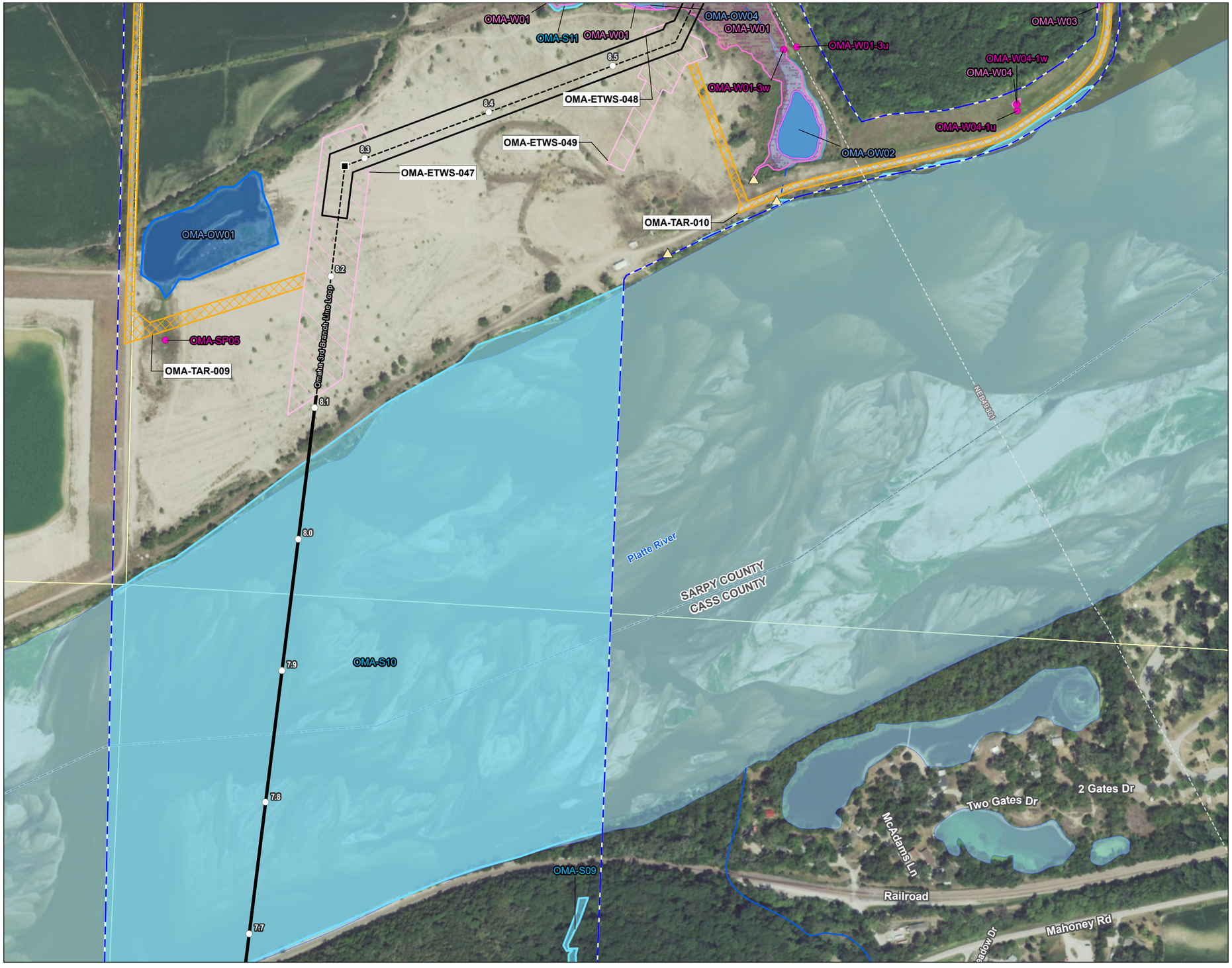

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project

172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location

Precinct of Platford-Springfield II
Sarpy & Cass Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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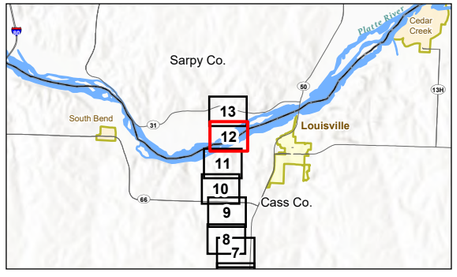
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Open Water
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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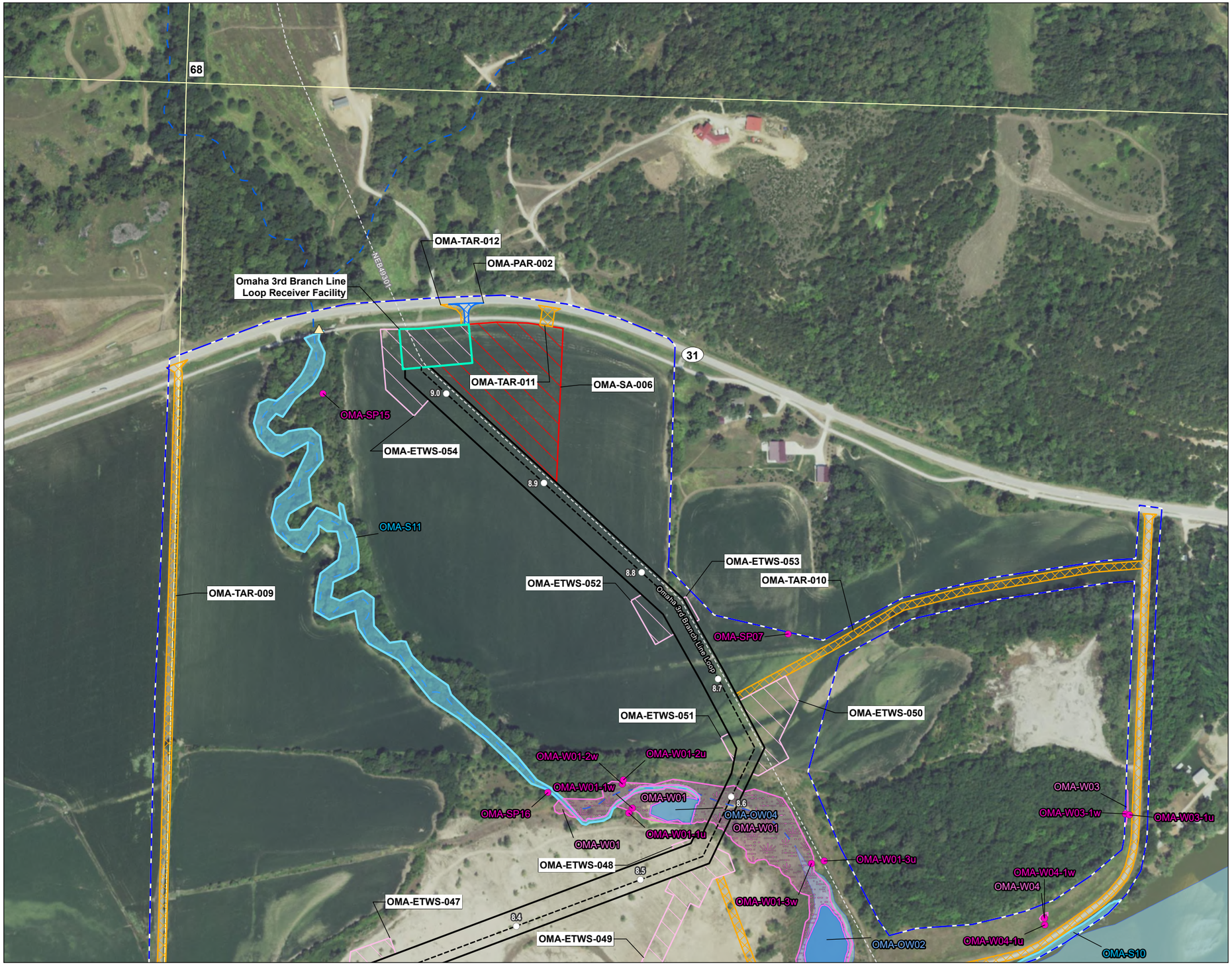

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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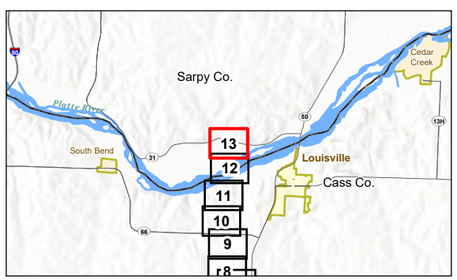
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Open Water
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

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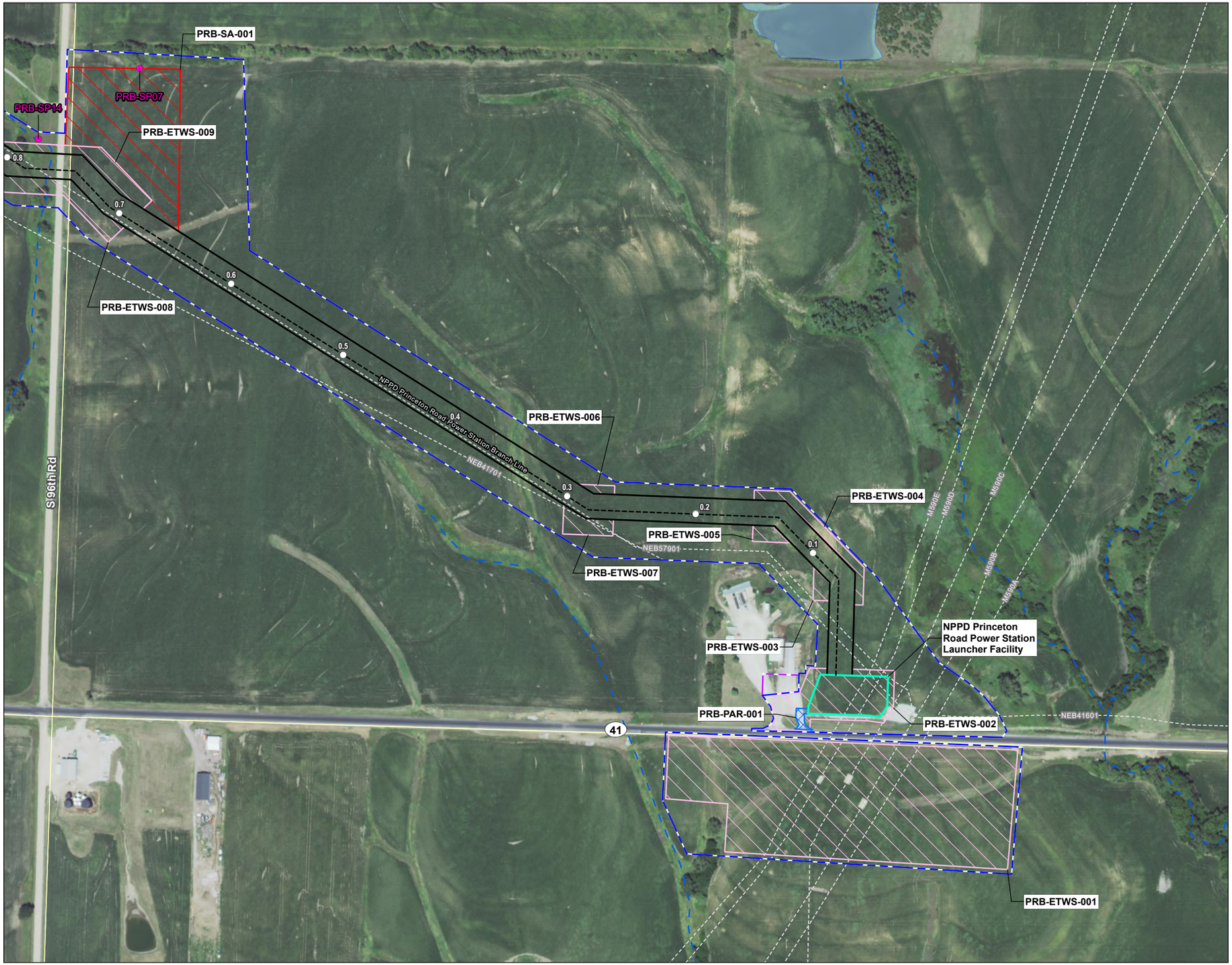

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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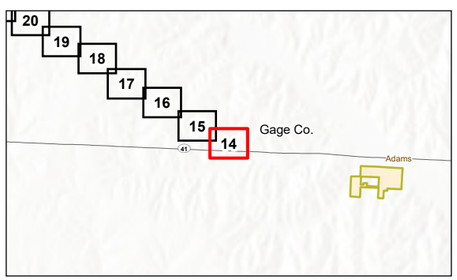
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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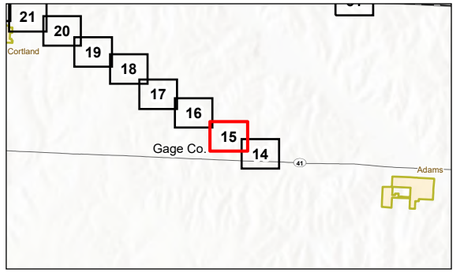
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Sample Point
- Field Delineated Open Water

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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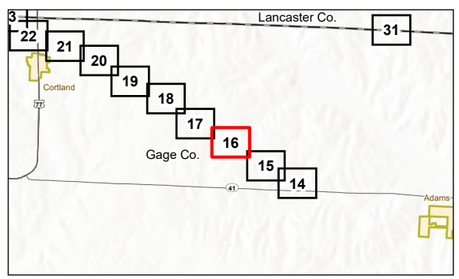
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Northern Natural Gas

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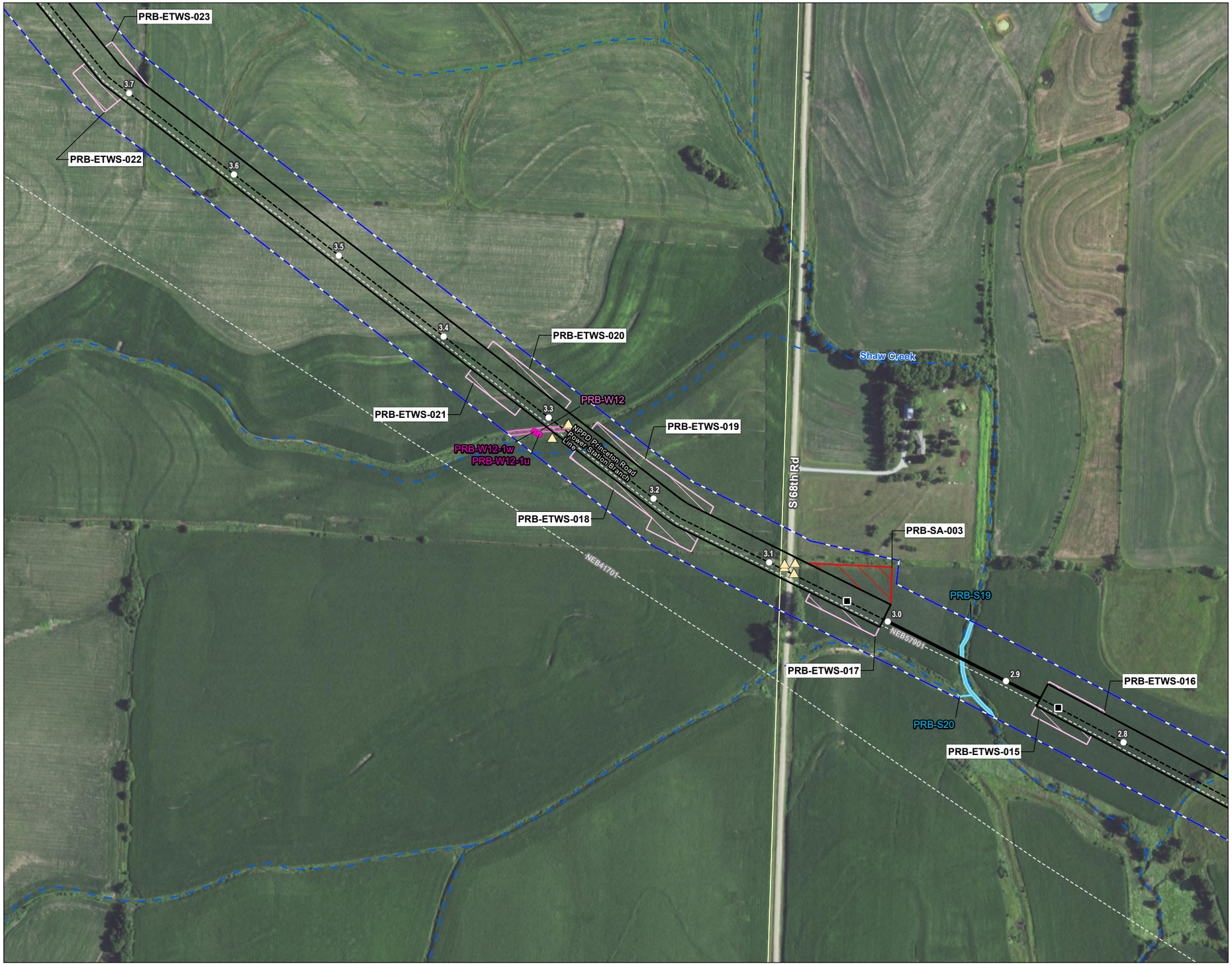


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

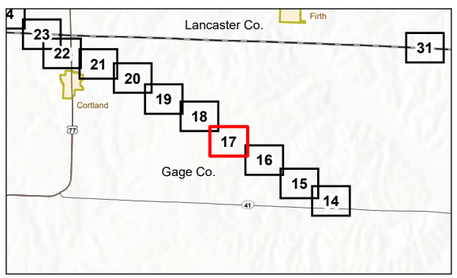
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

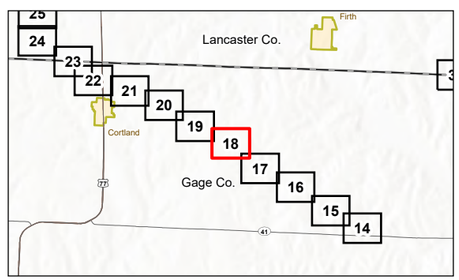
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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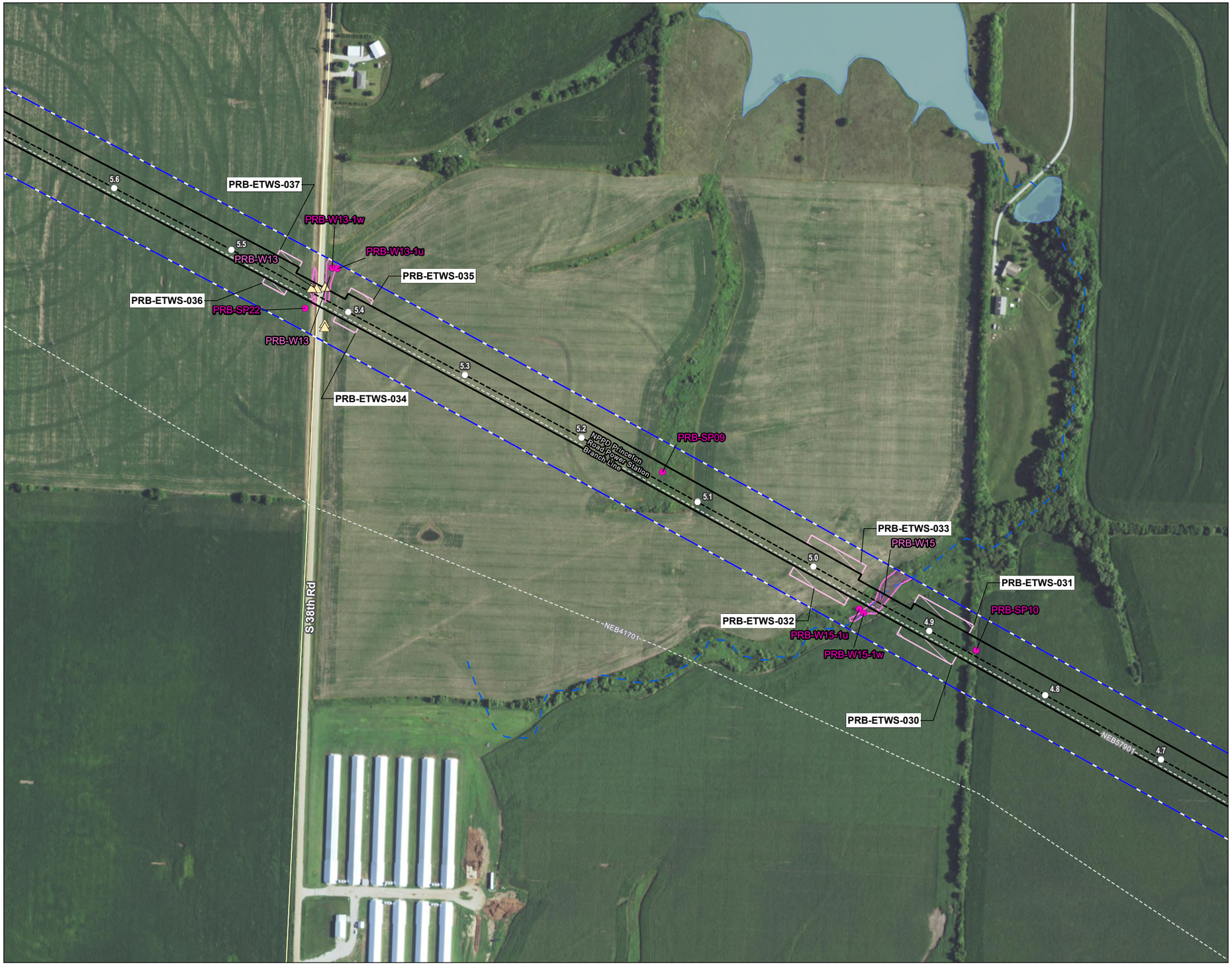


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

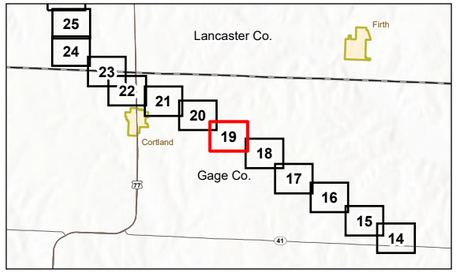
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

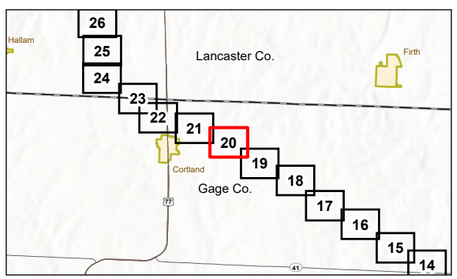
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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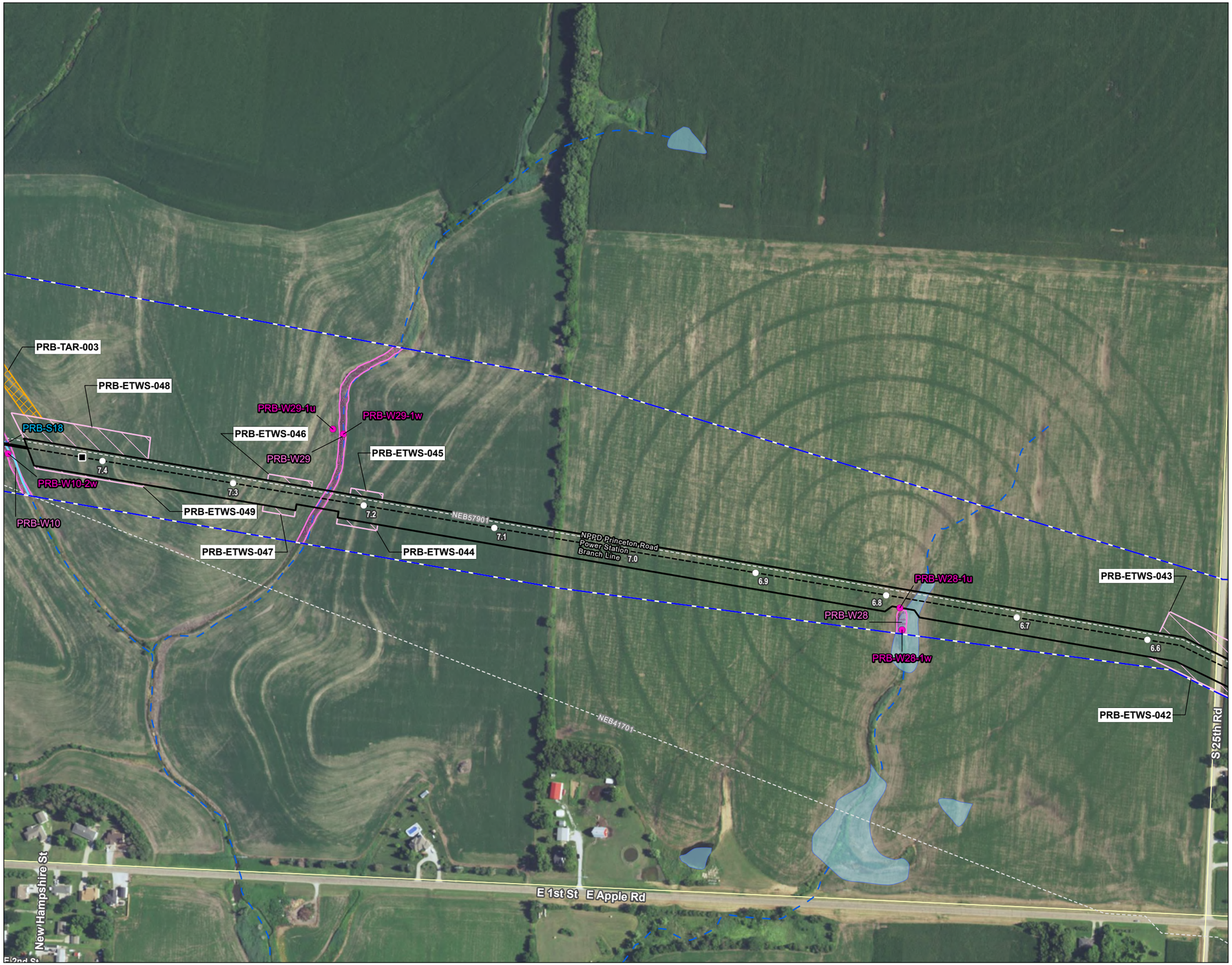


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

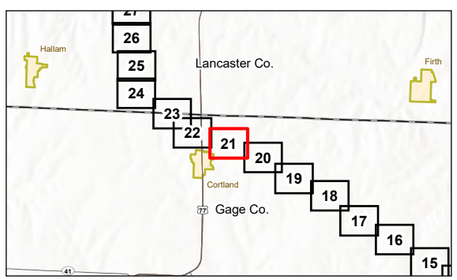
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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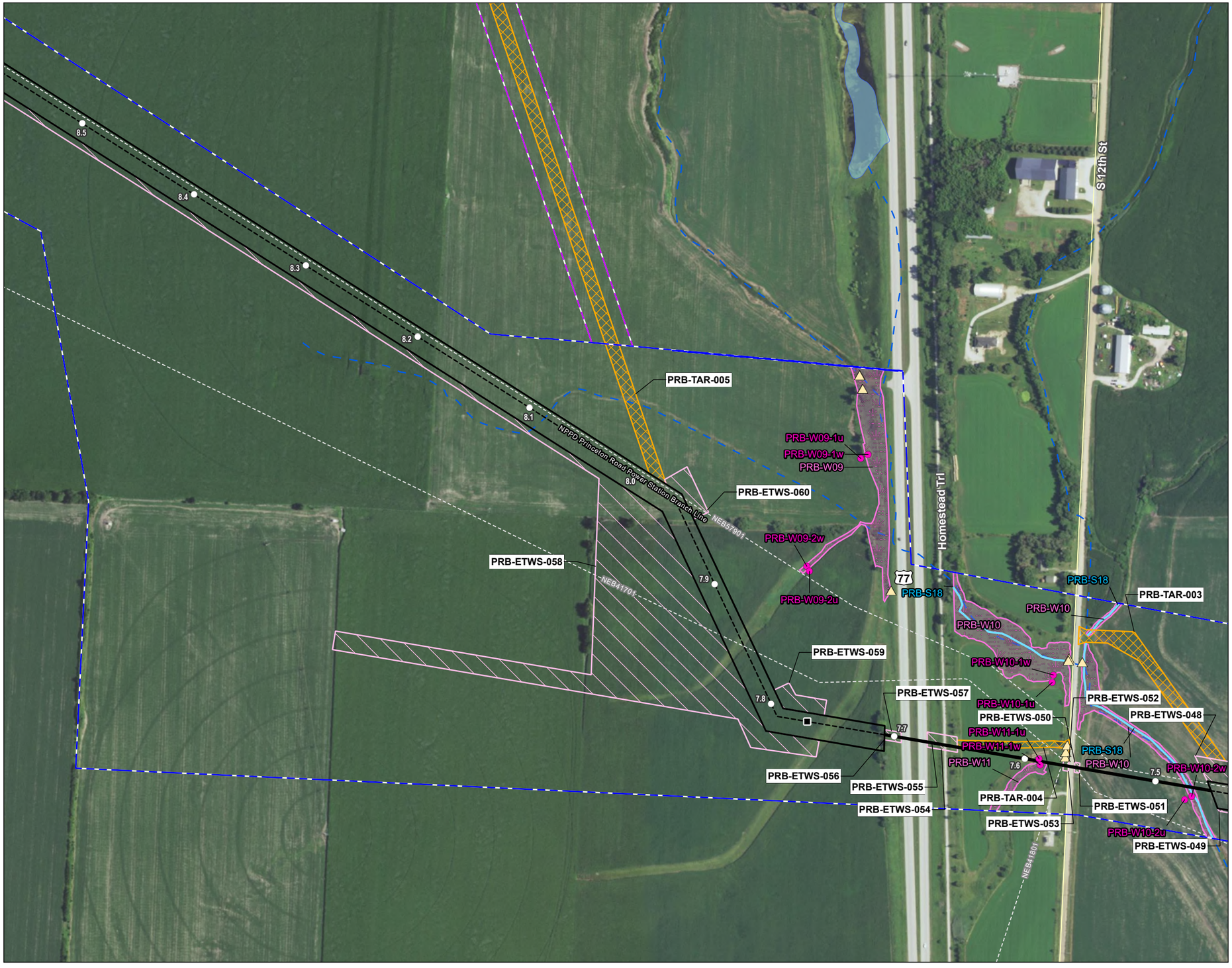

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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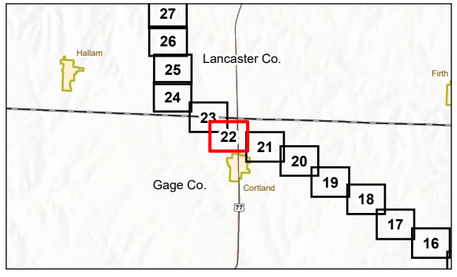
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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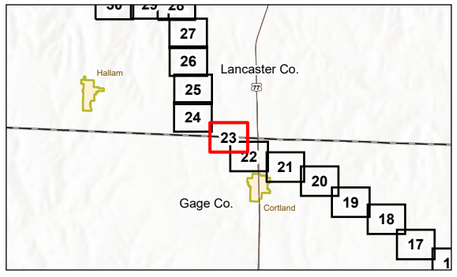
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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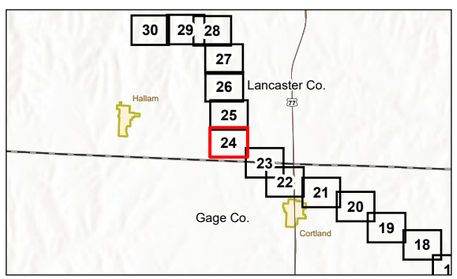
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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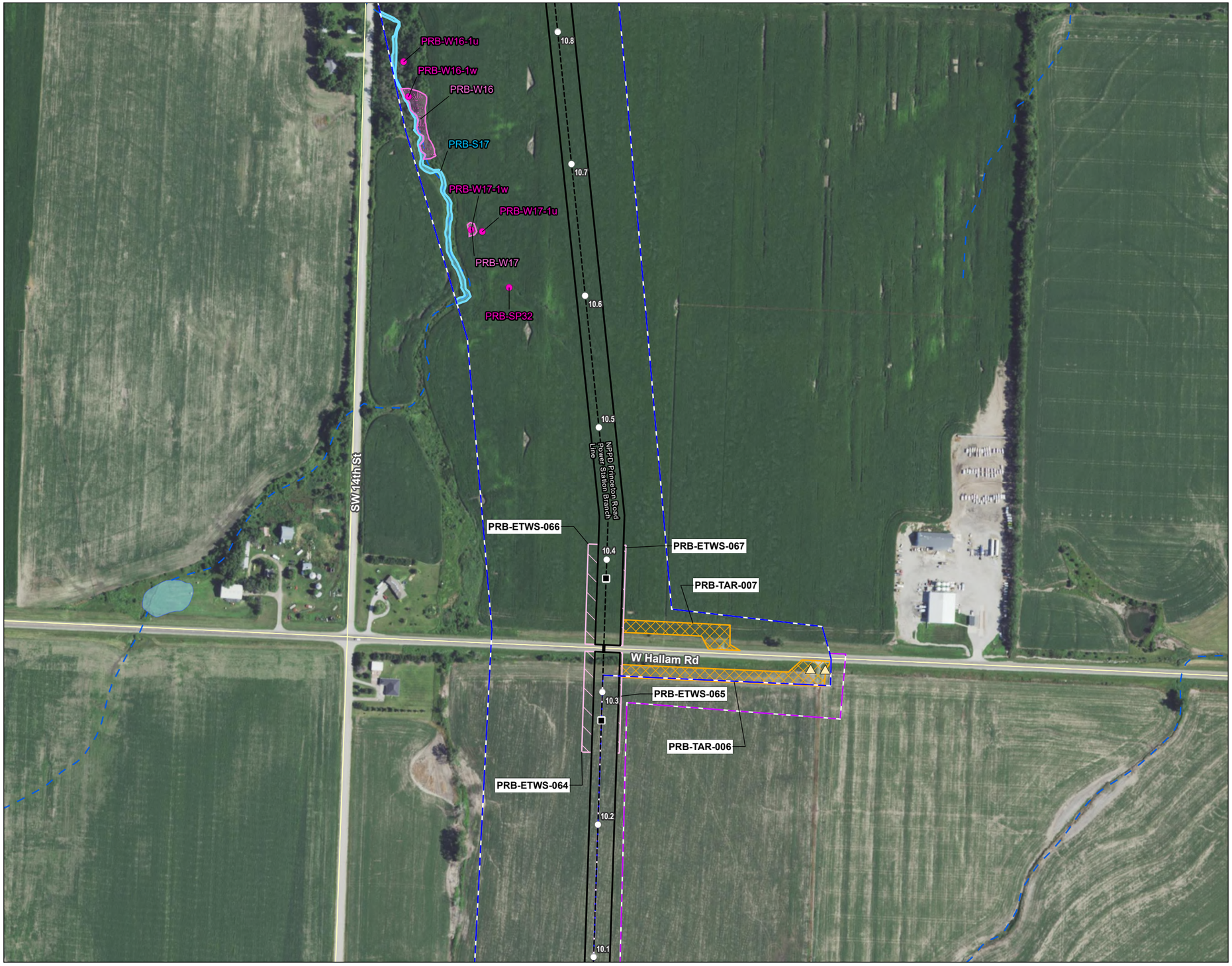

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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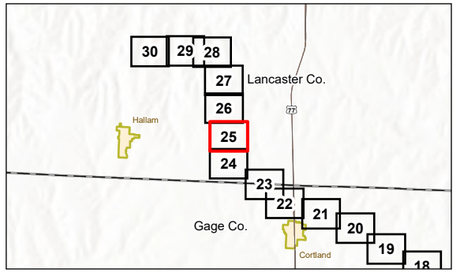
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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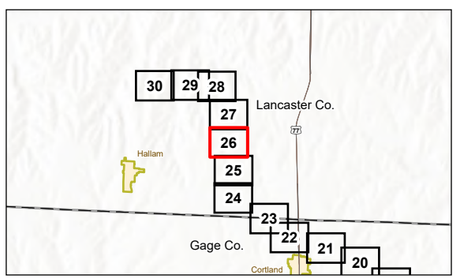
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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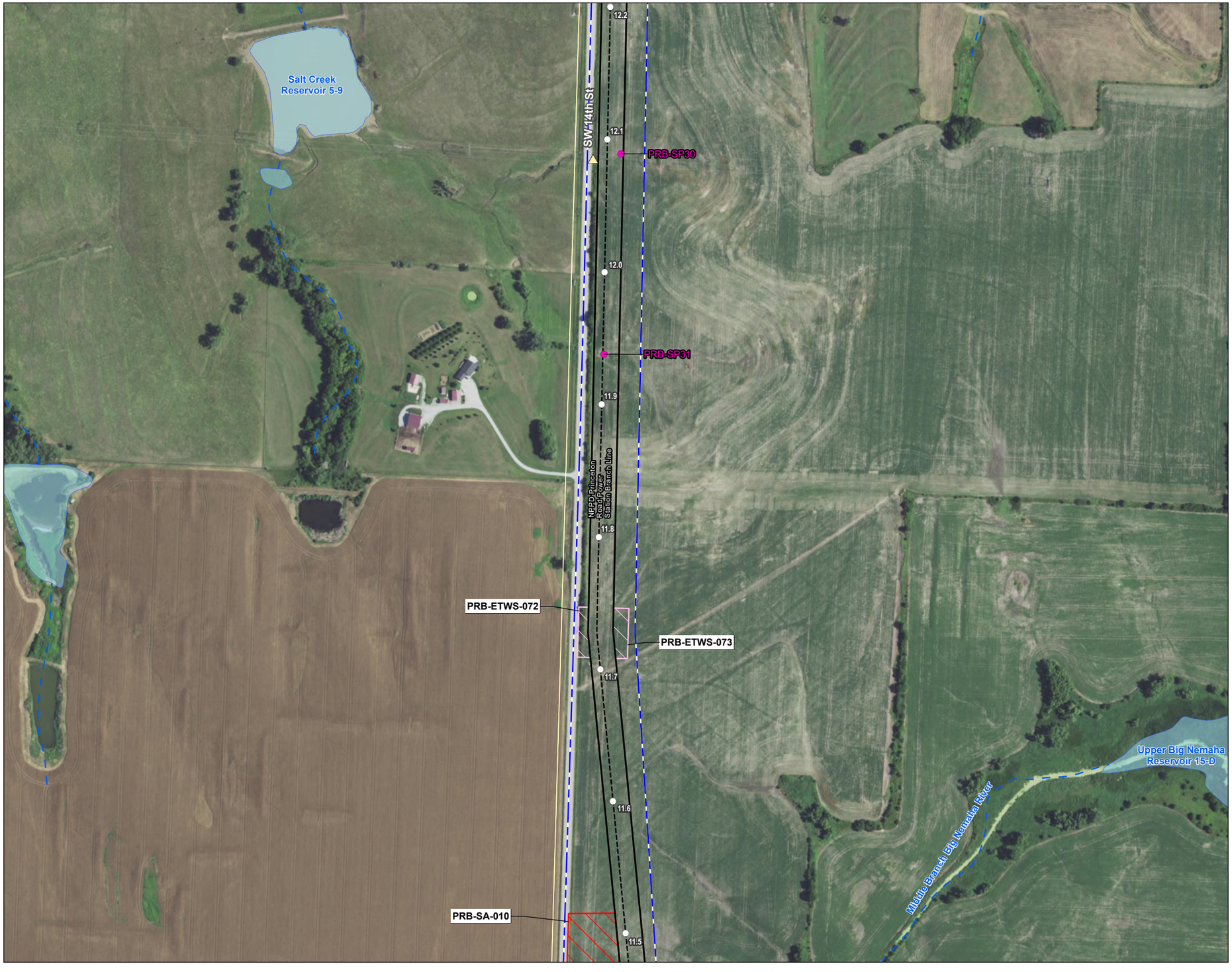

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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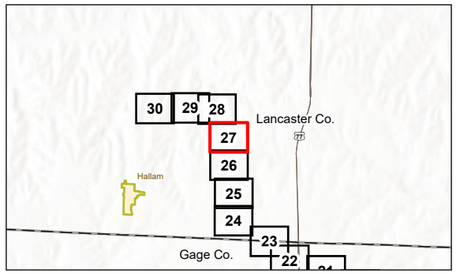
Legend
- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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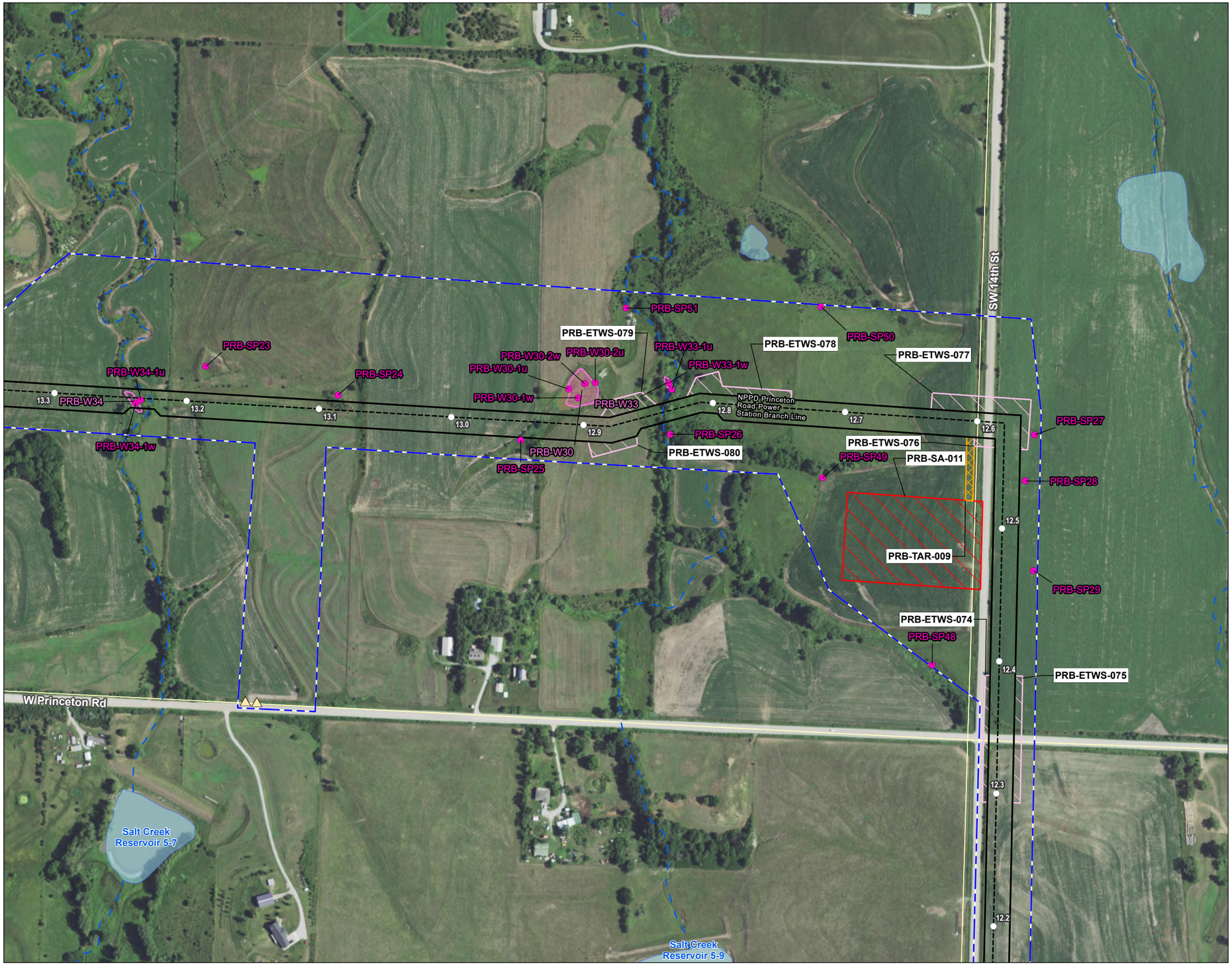

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
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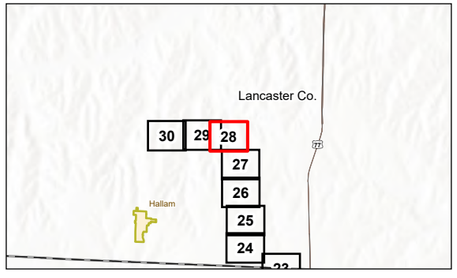
Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
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Legend
- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

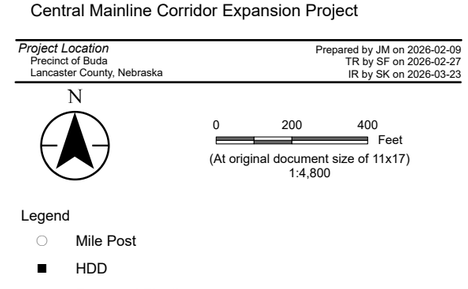

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
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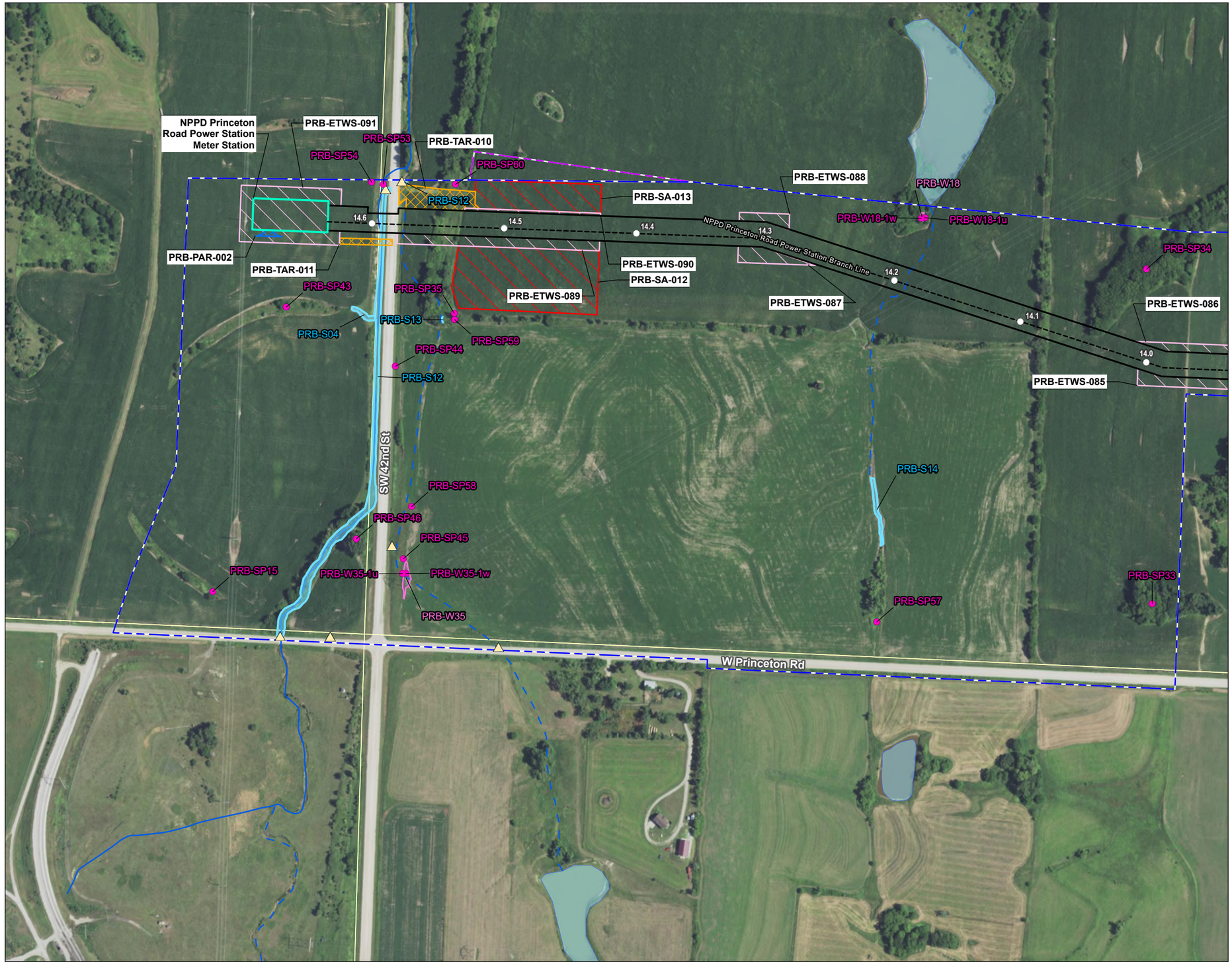

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Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

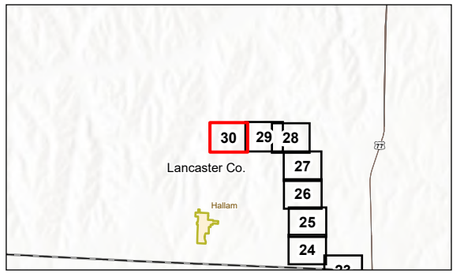

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

0 200 400 Feet
(At original document size of 11x17)
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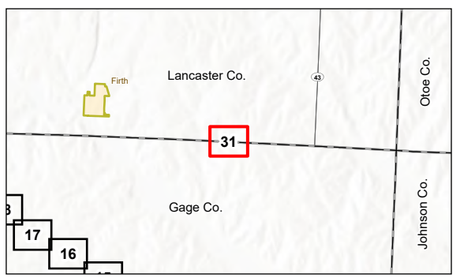
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Extra Temporary Workspace

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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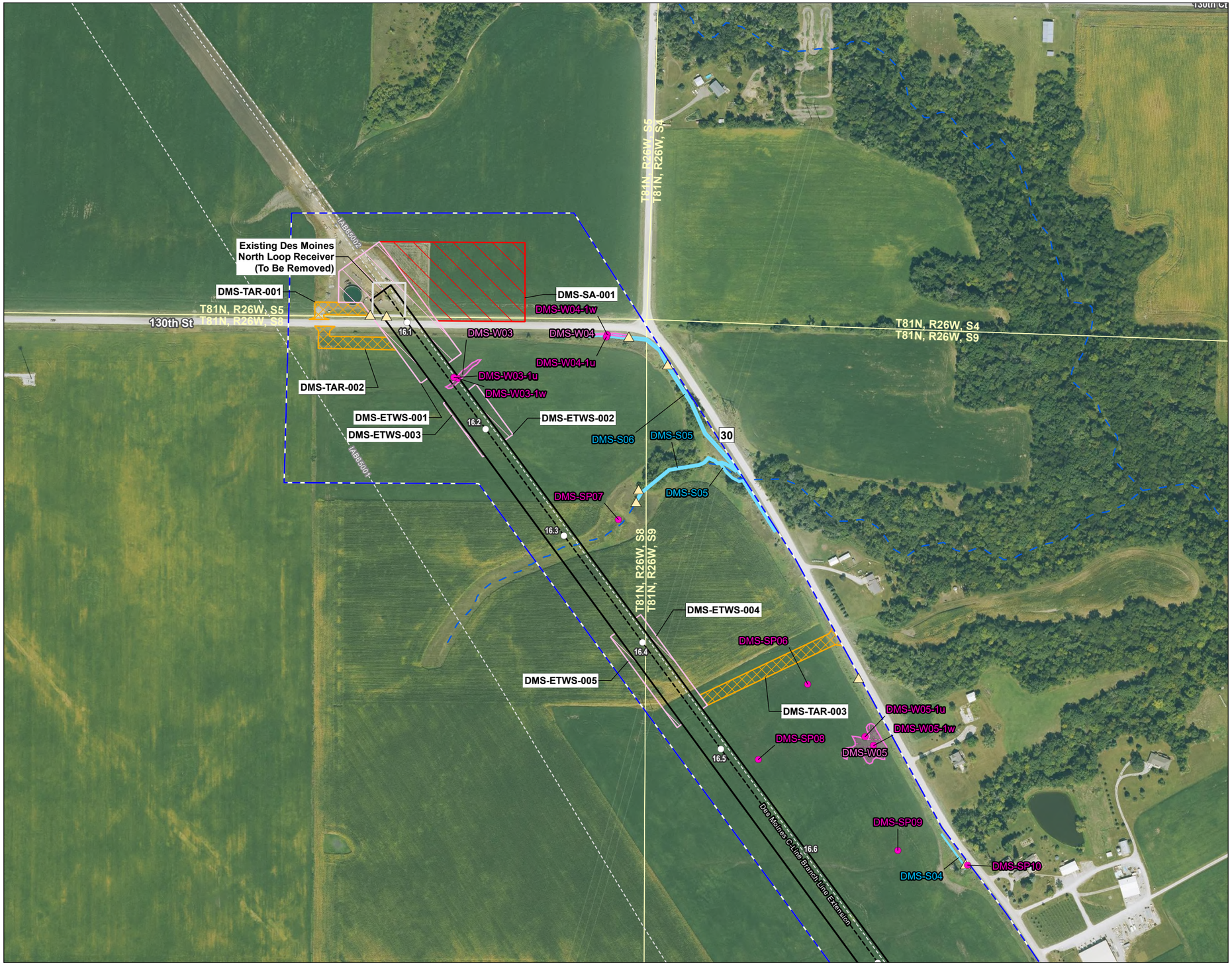


Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

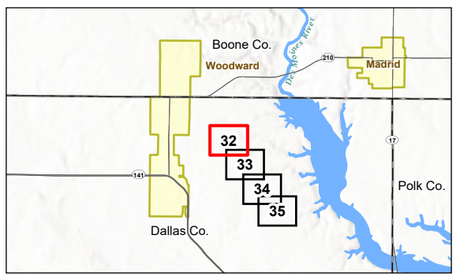
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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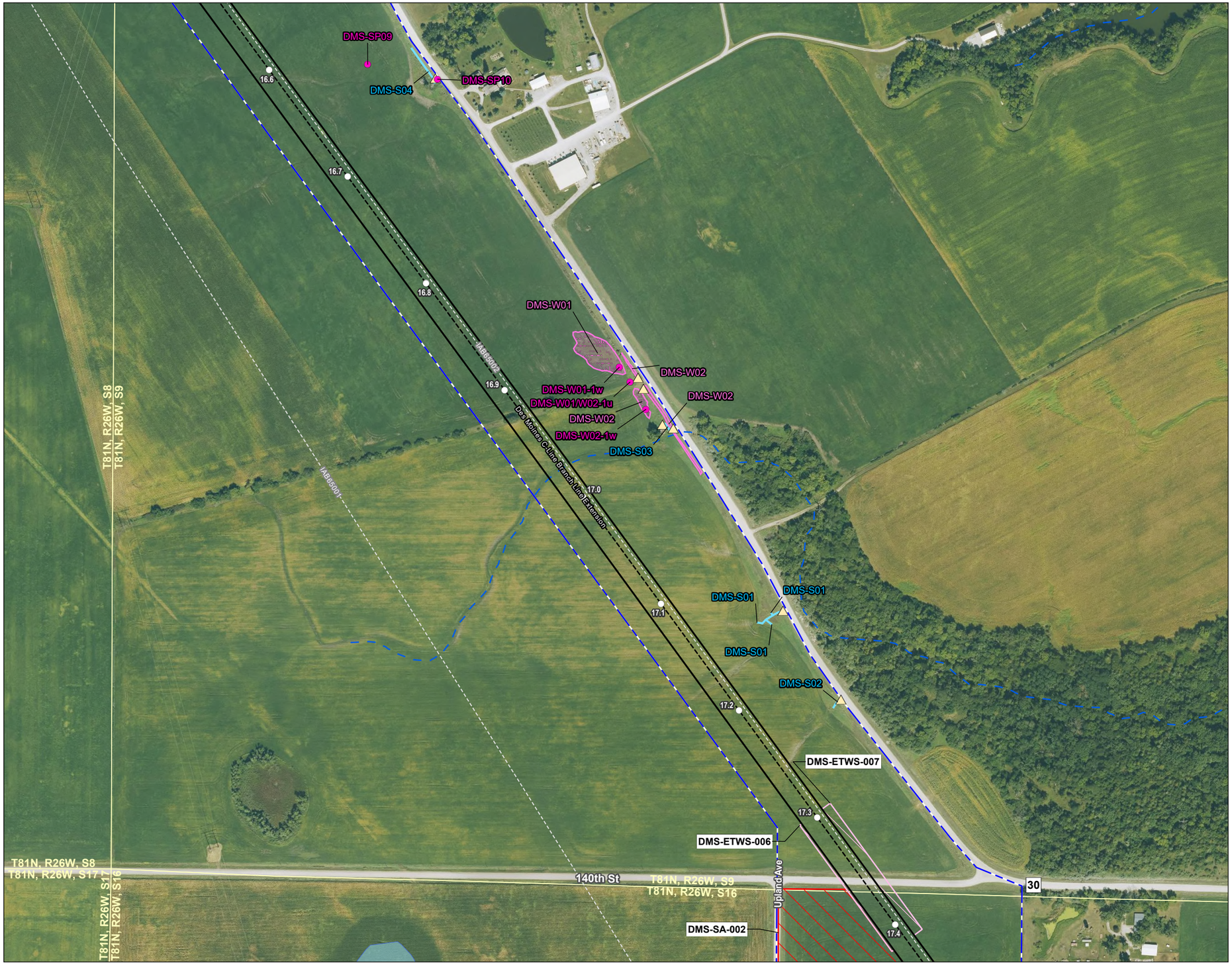

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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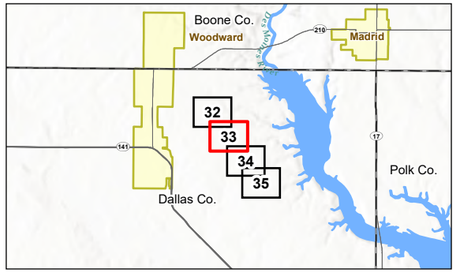
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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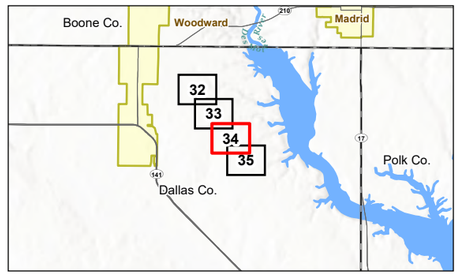
Legend
- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Sample Point

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

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Northern Natural Gas

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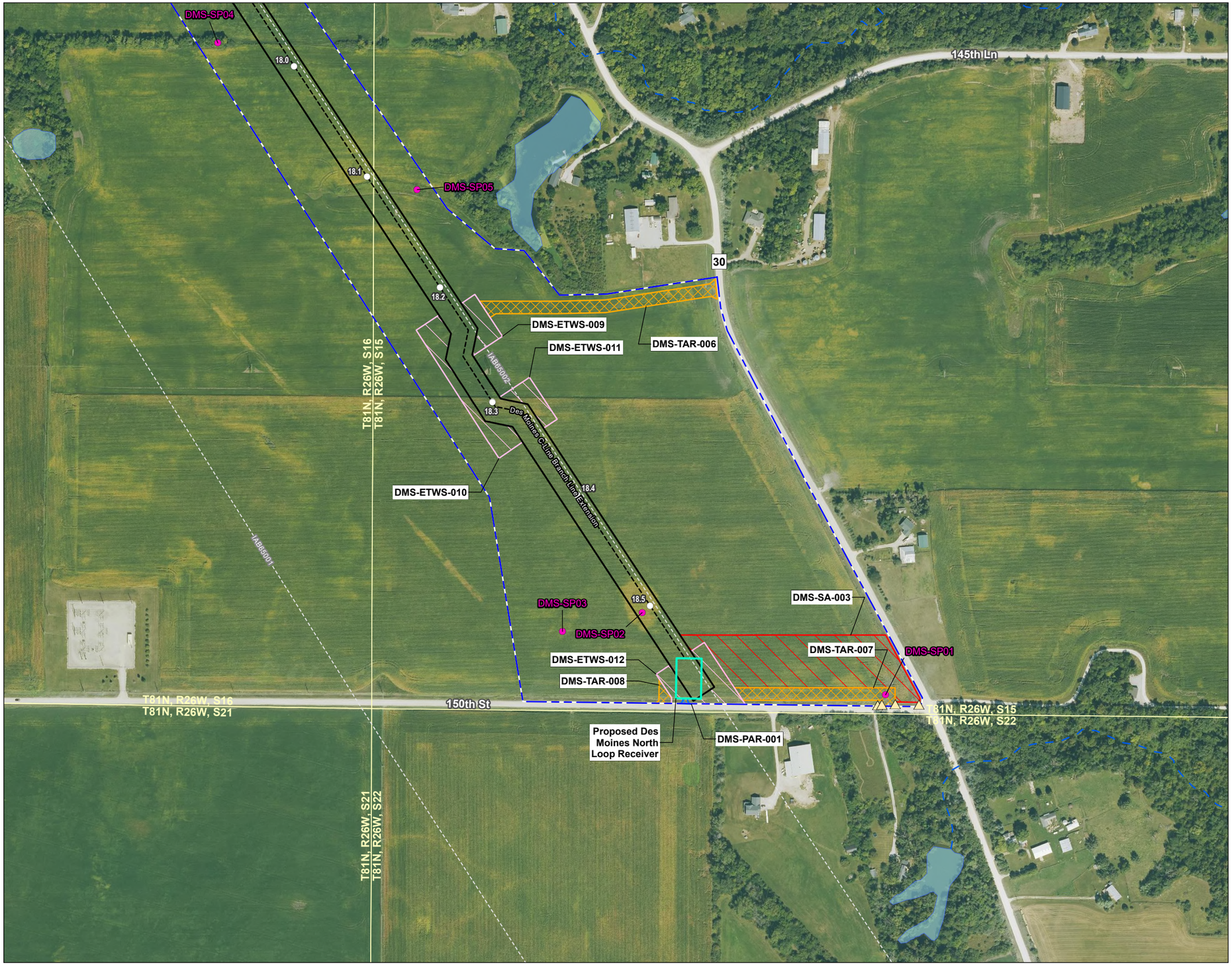

Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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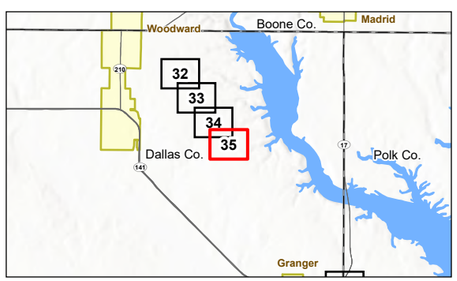
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Des Moines C-Line South Loop Uprate - Royal Estates Reducing Station

Client/Project

172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Townships of Grant & Jefferson
Dallas & Polk Counties, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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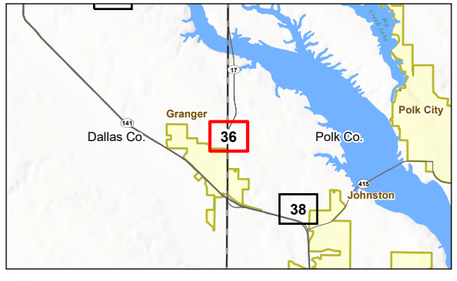
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Des Moines C-Line South Loop Uprate - Des Moines A-line Launcher Facility

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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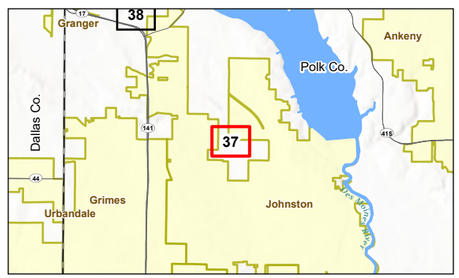
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Des Moines C-Line South Loop Uprate - Grimes Iowa TBS

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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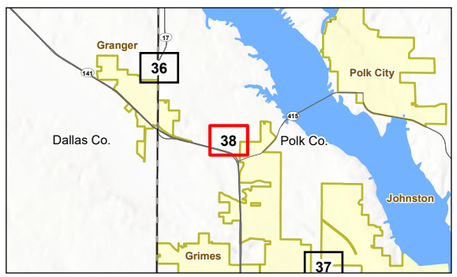
Legend
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Clarion Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Lake
Wright County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

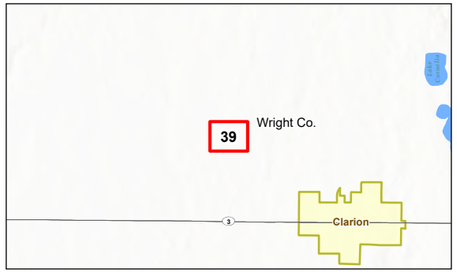
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Extra Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Beatrice Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Riverside
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

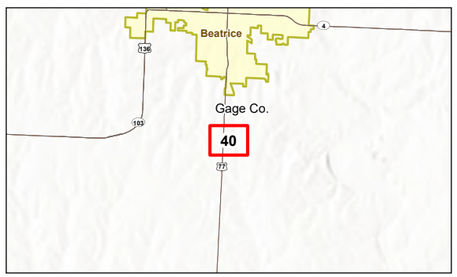

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Gutherie Center Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Bear Grove
Gutherie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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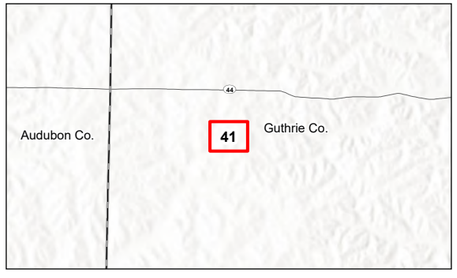
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Waterway Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies Oakland Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Center
Pottawattamie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

N

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(At original document size of 11x17)
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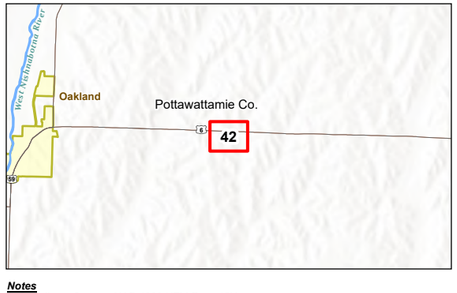
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Open Water

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Figure No.

2-2

Title

Field Delineated Wetland and Waterbodies
Ogden Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Yell
Boone County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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Legend
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

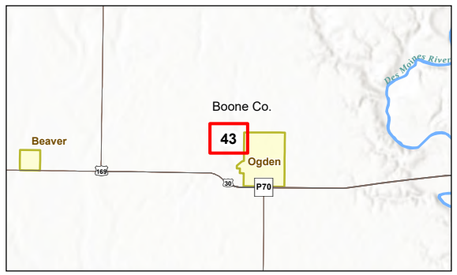

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Figure No.
2-2

Title
Field Delineated Wetland and Waterbodies
Palmyra Compressor Station

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of North Palmyra
Otoe County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-27
IR by SK on 2026-03-23

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(At original document size of 11x17)
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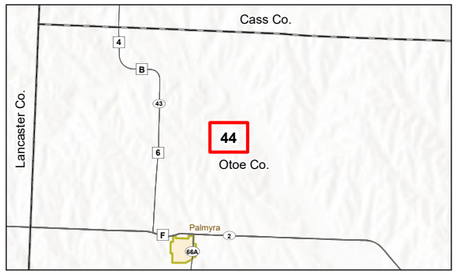
Legend
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Sample Point

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Revised: 2026-03-26 By: jmarty
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Appendix 2A
Spill Prevention, Control and Countermeasure Plan

Northern Natural Gas
Spill Prevention, Control and Countermeasure (SPCC) Plan
For Construction Projects

Introduction

This SPCC Plan describes planning, prevention and control measures to minimize impacts resulting from spills of fuels, petroleum products, or other regulated substances as a result of pipeline facility construction. These measures will be implemented by the contractor, unless otherwise indicated, during Northern Natural Gas (Northern) pipeline facility construction projects. This SPCC Plan was developed in accordance with the Federal Energy Regulatory Commission's Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures) and satisfies the requirements for SPCC Plans described therein. This plan must remain on-site.

1 Planning and Prevention

Northern requires its contractors to implement proper planning and preventative measures to minimize the likelihood of spills, and to quickly and successfully clean up a spill should one occur. Northern developed this SPCC Plan to set forth the minimum standards for handling and storing regulated substances, and for cleaning up spills. Potential sources of construction-related spills include storage tank leaks, machinery and equipment failure, and fuel handling and transfer accidents. The contractor will be responsible for implementing, at a minimum, the following planning and prevention measures.

1.1 Roles and Responsibilities:

Contractor Spill Coordinator

1.1.1 A contractor spill coordinator shall be designated and employed by the contractor, subject to approval by Northern on projects where outside contractors are used for construction. The spill coordinator may also be a designated Northern employee.

1.1.2 The contractor spill coordinator shall notify the environmental inspector (EI) immediately of any spill, regardless of volume. If the EI is not available, the contractor spill coordinator shall notify Northern's Operations Communication Center (OCC) at 888-367-6671 within 30 minutes of the occurrence.

1.1.3 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill.

1.1.4 The contractor spill coordinator will assist the EI in completion of the Spill Release/Report form (environmental procedure 320.101a, Appendix A: Spill/Release Report Form).

1.1.5 The contractor spill coordinator will identify available emergency response contractors. The emergency response contractors will be subject to Northern's approval.

1.1.6 The contractor spill coordinator shall assist the emergency response contractor and monitor containment activities to ensure the actions are consistent with the requirements of this SPCC Plan.

1.1.7 The contractor spill coordinator, in consultation with the Division Environmental Specialist (DES), on-site Northern representative or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.8 The contractor spill coordinator should **not** contact any agency regarding a spill without authorization from Northern's environmental department.

Environmental Inspector (EI)

1.1.9 The EI may be a designated Northern employee or a third-party inspector assigned to monitor environmental compliance on the project.

1.1.10 The EI will monitor the contractor's compliance with the provisions of this SPCC Plan.

1.1.11 The EI will immediately report all spills to the OCC at 888-367-6671, the construction coordinator and other Northern personnel, as required.

1.1.12 The EI, with assistance from the contractor spill coordinator, is responsible for completing a Spill Release/Report Form and submitting it to the DES within 24 hours of the occurrence for all spills, regardless of volume.

1.1.13 Both the contractor spill coordinator and the EI, in conjunction with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.14 The EI should not contact any agency regarding a spill without authorization from the DES.

Construction Coordinator

1.1.15 The construction coordinator is a designated Northern representative who is responsible for the management of construction activities on the project.

1.1.16 The construction coordinator is responsible for documenting the general information regarding any spills such as, work stoppages, injuries, fires and the extent of exposure to on-site personnel.

1.1.17 The construction coordinator, in consultation with the DES or appropriate agencies, will assist in determining when it is necessary to evacuate spill sites to safeguard human health.

1.1.18 The construction coordinator is responsible for coordinating any emergency response services that may be required such as the Fire Department, the Sherriff's Department, or for contacting emergency response contractors.

Authorized Personnel

1.1.19 Authorized personnel are representatives of the contractor who are designated to handle fuel, lubricants or other regulated substances.

1.1.20 Authorized personnel shall be familiar with the requirements of this SPCC Plan and the consequences of non-compliance.

Contractor's Construction Superintendent

1.1.21 The contractor's construction superintendent, or representative, must immediately notify the EI of any spill of any liquid, (i.e. a petroleum product, hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.22 The contractor's construction superintendent is ultimately responsible for ensuring that construction personnel understand and comply with this SPCC Plan.

Construction Personnel

1.1.23 Construction personnel are representatives of the contractor involved with installation of the pipeline facility.

1.1.24 Construction personnel shall notify the crew foreman and/or contractor's spill coordinator immediately of any spill of any liquid (i.e. a petroleum product or hazardous liquid, water, casing wax, etc.), regardless of volume.

1.1.25 Construction personnel are responsible for beginning the initial spill containment and clean-up.

Environmental Specialist

1.1.26 The environmental specialist is a designated Northern employee who is responsible for the management of environmental compliance on the project.

1.1.27 The environmental specialist is the EI's initial point of contact when a spill occurs and will assist in determining the containment measures that may be required.

1.1.28 The environmental specialist will promptly report spills to appropriate Federal, State, and local agencies as required.

1.1.29 The environmental specialist will coordinate with these agencies regarding contacting additional parties or agencies.

1.1.30 The environmental specialist will promptly notify the U.S. Coast Guard National Response Center of spills, regardless of size, that enter lakes, streams or other standing or flowing waters. (The National Response Center phone number is listed in section 4.2 of this SPCC Plan).

1.1.31 The environmental specialist, in consultation with appropriate agencies, will assist in determining when spill sites will be evacuated, as necessary, to safeguard human health.

1.2 Training:

1.2.1 The contractor spill coordinator shall train all employees handling fuels and other regulated substances to follow and comply with this SPCC Plan.

1.2.2 The contractor's construction superintendent will be responsible for ensuring that such training is received prior to construction activities.

1.2.3 The EI will specifically address compliance with this SPCC Plan while delivering Environmental Training-Construction, environmental training Type B to contractor personnel and/or while reviewing safety procedure 110.180b, Contractor Orientation Checklist and Roster with contractor personnel. (See environmental procedure 380.201, Environmental Compliance for Construction Projects, for training program requirements.)

1.3 Equipment:

1.3.1 All equipment must be thoroughly cleaned prior to arrival on-site. Equipment with existing fluid leaks will not be allowed on-site.

1.3.2 All equipment repairs and maintenance must be completed offsite. In the event that a repair is required to remove the equipment, or removing the equipment is more likely to cause a spill than an onsite repair, adequate liquid storage must be utilized in addition to secondary containment to contain any liquids during the repair. Ensure the capacity of existing secondary containment is adequate for the repair.

1.3.3 Each piece of self-propelled equipment (i.e. dozers, excavators, side booms, etc.) must be equipped with a spill kit. At a minimum, the spill kit must include sufficient absorbent pads and plastic lining material to contain spills resulting from mechanical failure.

1.3.4 Directional drilling rigs must be equipped with a spill kit of appropriate size to contain any potential spills. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure.

1.3.5 Each piece of stationary equipment, excluding directional drilling rigs, (i.e. generators, air compressors, water pumps, etc.) must have access to a spill kit. The spill kit must be located in the immediate vicinity of the stationary equipment and in an easily accessible area no farther than 100 yards. At a minimum, spill kits must include absorbent pads, booms, a temporary disposal bag, disposable nitrile gloves and plastic lining material to contain spills resulting from mechanical failure. The appropriate quantities will depend on the number of pieces of stationary equipment and are subject to approval by the on-site Northern representatives.

1.3.6 Each piece of stationary equipment, including drilling rigs, must be parked inside appropriately sized and constructed secondary containment. Any self-propelled equipment parked for more than 24 hours is considered stationary.

1.3.7 Each contractor vehicle must be equipped with a catch pan and a spill kit containing a sufficient quantity of absorbent and barrier materials to

adequately contain and recover foreseeable spills. These kits may include, but are not limited to absorbent pads, straw bales, absorbent clay, sawdust, floor-drying agents, spill containment barriers, plastic sheeting, skimmer pumps and holding tanks.

1.3.8 For personal vehicles driven by contractor personnel and parked daily at construction project contractor yards, the contractor spill coordinator must provide on-site spill kits of adequate size to be stationed in easily accessible areas in the event of a spill resulting from a personal vehicle.

1.3.9 All fuel and service vehicles shall carry materials that are adequate to control foreseeable spills. Such material may include, but is not limited to, absorbent pads, commercial absorbent material, plastic bags with ties and a shovel.

1.3.10 Suitable plastic lining materials must also be available for placement below and on top of temporarily stored contaminated soils and materials.

1.3.11 The contractor spill coordinator will make known to authorized personnel, construction personnel, and the EI, the locations of spill control equipment and materials and have them readily accessible during construction activity. Spill kits must be replenished following each spill clean-up.

1.3.12 Construction equipment shall not be parked overnight or fueled within 200 feet of residential water wells, within 400 feet of municipal or community water wells, or within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

1.3.13 All fuel nozzles shall be equipped with functional automatic shut-offs.

1.3.14 In large wetlands where no upland site is available for refueling, auxiliary fuel tanks on construction equipment are recommended.

1.3.15 Fuel trucks transporting fuel to on-site construction equipment shall travel only on approved access roads.

1.4 Supervision and Inspection:

1.4.1 Prior to construction, the contractor spill coordinator, or designee, shall perform an inspection and test of all equipment to ensure that it is in good condition and free of leaks.

1.4.2 During construction, the contractor spill coordinator, or designee, shall perform daily inspections on hoses, hydraulic cylinders, fluid reservoirs, hydraulic connections, valves, pipes and tanks to ensure equipment is free of leaks.

1.4.3 On a daily basis, prior to commencing construction activities, the contractor spill coordinator, or designee, must complete Northern's Daily Equipment Spill Prevention Checklist (environmental procedure 380.201c, Daily Equipment Spill Prevention Checklist) and provide the original copy to the on-site EI or a Northern representative. The EI maintains these documents

in a file for the course of a week. If a spill occurs within the week, this document is attached to the Spill/Release Report Form.

2 Liquid Transfer Plans:

2.1 The contractor spill coordinator will prepare a site-specific liquid transfer plan prior to the transfer of any liquids for construction activities which require manipulation of valves or removal of plugs (e.g., pipeline liquids, hydrostatic test water, fuel, glycol or oil) where spills can occur.

2.2 The liquid transfer plan must also address any other activities that have potential to result in a liquid release without proper planning (e.g., pipeline cutting pig launching/removing or draining of drips).

2.2.1 For pipeline cutting activities, the liquid transfer plan must include step-by-step instructions with diagramed drawings for how to check for liquids prior to performing any cutting activities.

2.3 At a minimum, the liquid transfer plan must include detail for the correct location of secondary containment and positioning of all valves, plugs and hoses prior to, during and at the completion of the liquid transfer process.

2.4 The liquid transfer plan must be reviewed by the EI prior to execution of any liquid transfer. In the EI's absence, the chief inspector will review the liquid transfer plan.

2.5 The liquid transfer plan must be maintained by contractor personnel responsible for the respective liquid transfer process and updated as needed when procedures or processes change.

2.6 Contractor personnel will review the status of liquid transfer configurations during shift changes to ensure proper communication between crews.

3 Storage and Handling of Fuels/Hazardous Liquids

3.1 Typical Fuels, Lubricant and Hazardous Liquids:

3.1.1 The following table identifies fuels, lubricants and coolants generally present on pipeline construction spreads and identifies typical total volumes, storage and transportation methods. Contractors will have appropriate Safety Data Sheets (SDS) on-site, as required by the Occupation Safety and Health Administration (OSHA).

Typical Petroleum Storage and Handling Volumes on a Construction Spread

	Fluids	Typical Amounts	Storage	Typical Transport Mode
Fuels	Diesel	6,000-12,000 Gallons	1-3 Tanks or Tankers stored at contractor yard 5 gallon cans, 100 gallon storage in pickups, etc.	1-3 Fuel Trucks 1-3 "Fuel Skids"

	Military Aviation Kerosene [1]	6,000-12,000 Gallons		
	Kerosene [1]	6,000-12,000 Gallons		
	Gasoline	5,000 Gallons		
Lubricant	Engine Oil	< 500 Gallons	Bulk Storage or Retail Packaging at contractor yard warehouse	1-3 "Grease" Trucks
	Transmission/ Drive Train Oil	< 500 Gallons		
	Hydraulic Oil	< 500 Gallons		
	Gear Oil	< 500 Gallons		
	Lubricating Grease	20-30 cases of 24 cans per case		
Coolants	Ethylene Glycol	100 Gallons		
	Propylene Glycol	100 Gallons		

[1] Used straight or as additives only in extremely cold weather.

3.2 Storage of Fuel and Hazardous Liquids – General:

3.2.1 The contractor shall follow proper storage practices for fuels and hazardous liquids including, but not limited to, the following:

3.2.1.1 Fuel storage shall be at contractor yards only, or as approved by Northern.

3.2.1.2 Tools and materials to stop the flow of leaking tanks and pipes shall be kept on-site. Such equipment must include, but not be limited to, plugs of various sizes, a hammer, assorted sizes of metal screws with rubber washers, a screwdriver and plastic tape.

3.2.1.3 Fuels, lubricants, waste oil and any other regulated substances shall be stored in aboveground tanks only.

3.2.1.4 Storage tanks and containers must conform to all applicable industry codes.

3.2.1.5 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.2.1.6 If earthen containment dikes are used, they shall be constructed with slopes no steeper than 3:1 (horizontal to vertical) to limit erosion and provide structural stability.

3.2.1.7 It is the contractor's responsibility to remove all secondary containment structures at the conclusion of the project. The contractor is also responsible for returning the storage impoundment area to its original contour and appearance upon completion of the project.

3.2.1.8 Secondary containment areas must not have drains. If visual inspection indicates that no spillage has occurred in the secondary containment structure, accumulated water may be drawn off and sprayed on the surrounding upland areas in accordance with applicable permits. If spillage has occurred in the structure, accumulated waste shall be drawn off and pumped into drum storage for disposal. Water with a visible sheen must not be discharged on-site and must be hauled out for proper disposal.

3.2.1.9 Vehicle wastes resulting from equipment failure, including used oils and other fluids, shall be handled and managed by personnel trained in the procedures outlined in this Plan. Vehicle wastes will be stored and disposed of in accordance with section 6.0 of this SPCC Plan.

3.3 Refueling:

3.3.1 Fuels shall be dispensed by authorized personnel only. The contractor must provide adequate lighting for refueling after dark.

3.3.2 Personnel shall be actively holding the nozzle during all refueling. Absorbent pads shall be within reaching distance in the event of a nozzle malfunction.

3.3.3 Refueling shall not occur within 100 feet of a wetland or waterbody. These activities may occur closer only if the EI finds, in advance, no reasonable alternative and the contractor has taken appropriate steps to prevent spills. These steps include secondary containment structures.

3.3.4 Refueling shall not occur within 200 feet of residential water wells or within 400 feet of municipal or community water wells.

3.4 Refueling and Fuel Storage near Wetlands, Waterbodies or Rural Residences:

3.4.1 Northern requires that the storage of petroleum products, refueling and lubricating operations take place in upland areas that are more than 100 feet from wetlands, streams, and waterbodies (including drainage ditches), and 200 feet of residential water wells or within 400 feet of municipal or community water wells. In addition, the contractor must store hazardous materials, chemicals, fuel and lubricating oils, and perform concrete coating activities outside of these areas. Auxiliary fuel tanks solidly attached to

construction equipment or pumps are not considered storage and are acceptable.

3.4.2 In certain instances, refueling or fuel storage may be unavoidable due to site-specific conditions or unique construction requirements. Examples include continuously operating pumps and temporary stationary equipment associated with horizontal directional drilling (HDD) activities. These locations must be approved in advance by the EI. In addition to those practices described above, the following precautions will be taken when refueling within 100 feet of streams, wetlands, and waterbodies; within 200 feet of private water wells; or within 400 feet of municipal or community water wells:

3.4.2.1 Adequate amounts of absorbent materials and containment booms must be kept on-site by each construction crew to enable the rapid containment and clean-up of a spill incident.

3.4.2.2 If fuel must be stored within wetlands or near streams for refueling of continuously operating pumps, secondary containment must be provided.

3.4.2.3 A suitable secondary containment structure must be utilized at each fuel storage site. Portable secondary containment structures are preferred over site-constructed structures. If portable structures are not available, the site-constructed structures must be lined with seamless plastic sheeting. All structures must provide a minimum containment volume equal to the volume of the largest storage vessel; and provide at least 1 foot of freeboard.

3.4.2.4 Procedures regarding excavation and disposal of contaminated soil material from wetlands or near waterbodies are described in section 6.3 of this SPCC Plan.

3.4.2.5 Equipment operating within wetlands must be manned continuously or placed within proper secondary containment.

4 Initial Spill Management

4.1 Immediate Response:

4.1.1 Immediately upon learning of any fuel, oil, hazardous material or other regulated substance spill, or upon learning of conditions that will lead to an imminent spill, the person discovering the situation must:

4.1.1.1 Initiate actions to contain the fluid that has spilled or is about to spill, and initiate action to eliminate the source of the spill to the maximum extent that is safely possible.

4.1.1.2 Notify the contractor spill coordinator and the EI, and provide them with the following information:

4.1.1.2.1 Location and cause of the spill

4.1.1.2.2 The type and amount of material that has spilled

4.1.1.2.3 Whether the spill has reached, or is likely to reach, any surface water

4.1.1.3 Upon learning of a spill or a potential spill the contractor spill coordinator shall:

4.1.1.3.1 Assess the situation and determine the need for further action.

4.1.1.3.2 Direct subsequent activities and/or further assign responsibilities to other personnel.

4.1.1.3.3 Notify the EI

4.1.2 The EI will notify the OCC at 888-367-6671 and the construction coordinator.

4.2 Mobilization:

4.2.1 The contractor spill coordinator shall mobilize on-site personnel, equipment, and materials for containment and/or clean-up commensurate with the extent of the spill and notify the EI.

4.2.2 The DES will work with the EI and contractor spill coordinator to determine if a spill is reportable to an agency.

4.2.3 If the contractor spill coordinator and/or the EI determine that a spill is beyond the scope of on-site equipment and personnel, the contractor spill coordinator and/or the EI will immediately notify the contractor construction superintendent that an emergency response contractor is needed to contain and/or clean up the spill. The contractor is responsible for obtaining the services of an emergency response contractor.

4.2.4 The contractor spill coordinator shall assist the emergency response contractor and monitor containment procedures to ensure that the actions are consistent with the requirements of this SPCC Plan.

5 Spill Notification Responsibilities

5.1 The EI will immediately report all spills, regardless of volume, to Northern's OCC at 888-367-6671. The EI, or an applicable company representative, will participate on the OCC call to assess the spill. An environmental department representative will determine any requirements for further agency notification(s).

5.2 Spill Release/Report Form:

5.2.1 The EI, with assistance from the contractor spill coordinator, shall complete a Spill Release/Report Form for each release of a regulated substance, regardless of volume. The Spill Release/Report Form must be submitted to the DES within 24 hours of the occurrence of the spill.

5.2.2 All associated laboratory analysis and other documentation that may be required separately, on a case-specific basis, will be the responsibility of the contractor and should be provided to the EI. The EI will forward the information to the DES.

5.3 Agency Notification:

5.3.1 In the event of a reportable spill the DES will determine who is responsible for any required agency notification(s).

5.3.2 For projects in Minnesota, if there is any discharge of any substance or material, including hazardous materials, which, if not recovered, may cause pollution to waters of the state, the Minnesota Duty Officer shall be notified immediately. The Minnesota Duty Officer's phone numbers are 651-649-5451 and 800-422-0798.

5.3.3 For any spills that are determined to be the responsibility of Northern, the DES will promptly notify the appropriate Federal, State, and/or local agencies.

5.3.4 For any spills that are determined to be the responsibility of the contractor, the DES will request that the contractor spill coordinator promptly notify the appropriate Federal, State and/or local agencies.

5.3.5 The DES will promptly notify the National Response Center (NRC) at 800-424-8802 for all spills that impact streams, lakes or other waterbodies containing standing or flowing water.

5.3.6 The contractor spill coordinator will provide the EI and/or the Northern on-site representative all Spill Release/Report forms and associated information resulting from agency contact no later than 24 hours from the receipt of such documentation.

5.3.7 Northern's DESs and construction compliance personnel are listed below.

Name	Office Phone	Cell Phone
Kelly Henry	651-456-1712	612-759-8287
Naomi Cavalieri	402-398-7847	531-301-1176
*Steve San Miguel	402-398-7305	402-595-8554*
Michelle Brown	402-530-3502	806-231-4960
Christa Webber	402-398-7980	402-810-3769
Terry Plucker	402-398-7226	402-332-7081

6 Spill Containment and Clean-Up

6.1 In the event of a spill, the contractor will abide by applicable Federal, State and local regulations, in respect to cleaning up the spill. All clean-up and other construction related spill activities must be completed by, and costs assumed by, the contractor. Specific control and clean-up measures for both upland and wetland/waterbody spills are described below.

6.2 Spill Control and Clean-Up for Upland Areas:

6.2.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.2.1.1 Spill sources must be immediately identified and contained.

6.2.1.2 For large spills on land, the spills must be contained and pumped immediately into tank trucks. The contractor or, if necessary, an emergency response contractor, shall excavate the contaminated soil. It is the responsibility of the contractor to obtain Northern's approval prior to activities if waste vendors other than those approved by Northern (Clean Harbors and Safety-Kleen) may be used.

6.2.1.3 Spilled material and contaminated soil must be treated and/or disposed of in accordance with applicable Federal, State, and local requirements (section 6.0) and Northern's procedures.

6.2.1.4 Smaller spills on land shall be cleaned up with absorbent materials. Contaminated soil or other materials associated with these releases shall also be collected and disposed of in accordance with applicable regulations (section 6.0) and Northern's procedures.

6.2.1.5 Flowing spills must be contained and/or absorbed before reaching surface waters or wetlands.

6.2.1.6 Absorbent material(s) shall be placed over spills to minimize spreading and to reduce penetration into the soil.

6.2.1.7 The contractor spill coordinator and/or the DES, in consultation with appropriate agencies, shall determine when spill sites will be evacuated, as necessary, to safeguard human health. Evacuation parameters shall include consideration for the potential of fire, explosion, and hazardous gases.

6.3 Spill Control and Clean-Up for Wetlands and Waterbodies:

6.3.1 In addition to the measures described previously in this SPCC Plan, the following conditions shall apply if a spill, regardless of size, occurs near or into a stream, wetland or other waterbody:

6.3.1.1 If a spill should occur during refueling operations, **STOP** the operation until the spill can be controlled and the situation corrected.

6.3.1.2 For spills into streams, lakes or other waterbodies containing standing or flowing water, the contractor spill coordinator will immediately notify the nearest Northern representative and the OCC at 888-367-6671. The DES will promptly notify the NRC. (The NRC phone number is listed in section 4.2 of this SPCC Plan).

6.3.1.3 For spills in standing water floating booms, skimmer pumps and holding tanks shall be on-hand and used by the contractor to recover and contain released materials on the surface of the water.

6.3.1.4 If deemed necessary for large spills in waterbodies, the contractor must secure an emergency response contractor to further contain and clean up the spill. All contractors must be approved by Northern prior to construction.

6.3.1.5 Contaminated soils in wetlands must be excavated, and placed on, and covered by, plastic sheeting in bermed areas a minimum of 100 feet away from the wetland. Dispose of contaminated soil as soon as possible in accordance with section 6.0 of this SPCC Pan and Northern's procedures.

6.4 Inadvertent Mud Releases:

6.4.1 In the event of a drilling mud release (i.e., frac-out) to a sensitive resource area, including a waterbody, the contractor shall follow environmental procedure 380.203i, Appendix I: Plan for Inadvertent Release of Drilling Mud.

7 Storage and Disposal of Contaminated Materials

7.1 Environmental procedure 390.107, Approved Disposal Facilities, describes that all selected wastes generated at Northern facilities must be disposed of at Northern-approved waste facilities. The procedure also lists the locations of each Northern-approved disposal facility.

7.2 All contaminated soils, absorbent materials, and other wastes shall be stored and properly disposed by the contractor in accordance with applicable Federal and State regulations and Northern's procedures.

7.3 Only approved and licensed waste vendors and carriers may be used to transport contaminated material from the site to a Northern-approved disposal facility.

7.4 Used oil, glycol or hazardous wastes must be disposed by a Northern-approved contractor.

7.5 Environmental procedures regarding hazardous waste are located in the 390.000, Hazardous Waste Management, series of Northern's environmental operating procedures manual. The series includes procedures on manifesting and other transport requirements for off-site disposal.

7.6 Disposal of domestic wastes must be determined by the contractor and the information provided to the EI.

7.7 If it is necessary to temporarily store excavated soils on-site, these materials shall be 1) contained in plastic bags or, 2) placed on and covered by plastic sheeting. In addition, the perimeter of the storage area must include a berm to prevent and contain runoff.

8 REVISION HISTORY:

Responsibility for Procedure:

Address all questions on this procedure to the director of environmental.

Revisions:

Rev. 0	05/17/11	Initial procedure released.
Rev. 1	08/15/12	Changed Northern employee to Northern representative in section 1.1, Roles and Responsibilities, under Construction Coordinator. Updated information regarding spill kits in section 1.3, Equipment. Referenced Environmental Training-Construction. Included Minnesota Duty Officer contact information. Stated that the contractor shall follow Northern's Inadvertent Mud Release Plan for frac-outs. Added requirement for all contractor vehicles to be equipped with a catch pan. Updated formatting.
Rev. 2	12/14/12	Publish Only: Updated DES contact information.
Rev. 3	02/26/14	Added a section for liquid transfer planning and updated environmental department staff contact information.
Rev. 4	08/19/15	Publish Only: Updated DES and construction compliance personnel contact information.
Rev. 5	01/30/19	Publish Only: Division environmental specialists and construction compliance personnel contact information were updated in this procedure revision.
Rev. 6	01/06/21	Publish Only: Added section 1.3.5 stating existing practice for secondary containment for stationary equipment.
Rev. 7	02/17/21	Publish Only: Stated requirements for equipment repairs and maintenance.
Rev. 8	02/01/22	Publish Only: Division environmental specialist contact information was updated.

Appendix 2B
Wetland Delineation Report

Omaha 3rd Branch Line Loop

Wetland Delineation Report

Central Mainline Corridor
Expansion Project – Omaha 3rd
Branch Line Loop
Sarpy and Cass Counties,
Nebraska
Stantec Project #: 172609221

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Sign-off Sheet

This document entitled Wetland Delineation Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Northern Natural Gas (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

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Reviewed by (signature)

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1.0 INTRODUCTION

Stantec understands that Northern Natural Gas (Northern) is regulated by the Federal Energy Regulatory Commission (FERC) and is responsible to comply with the Clean Water Act and with applicable state and local wetland regulations. Both the United States (U.S.) Army Corps of Engineers (USACE) and Nebraska Department of Water, Energy, and Environment (NDWEE) have regulatory authority over wetlands, navigable waters, and adjacent lands. Northern is required to review proposed actions and determine whether such actions may affect a waterbody or wetland under the jurisdiction of the USACE or NDWEE. Northern secured the services of Stantec Consulting Services Inc. (Stantec) to conduct an evaluation for the proposed Central Mainline Corridor Expansion Project – Omaha 3rd branch line loop (Project).

The Environmental Survey Boundary (ESB) for the Project is approximately 1,404.75 acres in size and is located in Sarpy and Cass Counties, Nebraska (Appendix A, Figure 1). The purpose and objective of the wetland determination and delineation were to identify the extent and spatial arrangement of wetlands and waterways within the ESB. The wetland delineations for the Project were completed by Stantec in September 23-28, November 17-19, and December 22, 2025.

Wetland and waterways may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the NDWEE, and local regulation under jurisdiction of the local county, town, city, or village. Stantec recommends this report be submitted to local authorities, the NDWEE and USACE for final jurisdictional review and concurrence, as necessary.

2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), and Midwest Regional Supplement to the *Corps of Engineers Wetland Delineation Manual.*

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, National Hydrography Dataset (NHD) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. Antecedent precipitation was determined prior to the field investigation utilizing the USACE Antecedent Precipitation Tool (APT) (USACE 2025a). The tool compares precipitation totals from the three months prior to the date of the field efforts with 30-year normal amounts, calculating a weighted multi-month score and determining the climate conditions (dry, normal, wet).

A review of USDA Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP) aerial imagery and other available aerial imagery was conducted for the ESB to assist in the wetland delineation because farmed areas are present within the ESB with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wetland signatures within the farmed areas. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria.

The presence of mapped poorly and somewhat poorly drained soils, NWI mapping, and topography within the ESB was reviewed in conjunction with an analysis of available aerial imagery for wetland signatures in these areas. For each potential wetland area identified in the aerial imagery review, a sample point was collected during the field investigation. If the sample point met the wetland criteria, then the wetland area was mapped in the field.

The wetland boundary and sampling points were identified and surveyed with an iPad equipped with a Global Navigational Satellite System (GNSS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.

All parcels within the Project ESB were field surveyed except for parcel CA-048, which was not granted access permission to survey to date. Northern will continue to work with landowners to acquire appropriate access permissions in order to survey the entire ESB area.

2.2 WATERWAYS

Observed waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features were mapped and described. Geomorphological characteristics of each waterway were collected at a waterway sample point, including the width and height of top of bank, the width and height of the ordinary high-water mark (OHWM), and channel substrate. The waterway lines, polygons, and sample point locations were surveyed with an iPad equipped with ESRI Field Maps and a GNSS capable of sub-meter accuracy and mapped using GIS software. However, the review of waterway potential for federal jurisdiction was beyond the scope of the investigation.

3.0 RESULTS

3.1 SITE DESCRIPTION

The ESB is comprised of actively cultivated agricultural land, upland forest, riverine sand plains, grasslands, maintained road ROW, and wetlands. Overall, the ESB contains flat agricultural land, with steep forested ridges and valleys near large watercourses. Soils present within the ESB, and their hydric status are summarized in Table 1. Wetlands identified during the field investigation are located primarily within areas mapped as partially hydric, poorly drained soils and predominantly non-hydric, somewhat poorly drained soils (Appendix A, Figure 2).

Table 1. Summary of Soils Identified within the ESB

Soil Survey of Sarpy and Cass Counties, NE	Map Unit	Hydric Rating
Aksarben silty clay loam, 0 to 2 percent slopes	7205	Predominantly Non-Hydric
Aksarben silty clay loam, 2 to 6 percent slopes	7206	Non-Hydric
Alda-Platte complex, occasionally flooded	8408	Predominantly Non-Hydric
Cass-Wann fine sandy loams, occasionally flooded	8443	Non-Hydric
Colo-Nodaway complex, frequently flooded	7773	Partially Hydric
Contrary-Monona silty clay loams, 6 to 11 percent slopes	8155	Non-Hydric
Gibbon-Wann complex, occasionally flooded	8480	Non-Hydric
Hedville sandy loam, 7 to 20 percent slopes	4111	Non-Hydric
Hedville, Sogn, and Contrary soils, 12 to 75 percent slopes	4113	Non-Hydric
Inglewood-Novina complex, occasionally flooded	6460	Non-Hydric
Judson silt loam, 2 to 6 percent slopes	7231	Predominantly Non-Hydric

Soil Survey of Sarpy and Cass Counties, NE	Map Unit	Hydric Rating
Judson silty clay loam, 2 to 6 percent slopes	7234	Predominantly Non-Hydric
Judson-Nodaway channeled-Contrary complex, 0 to 12 percent slopes	7235	Predominantly Non-Hydric
Kennebec silt loam, occasionally flooded	7050	Predominantly Non-Hydric
Lex-Platte complex, occasionally flooded	8510	Non-Hydric
Marshall silty clay loam, 11 to 17 percent slopes, eroded	8028	Non-Hydric
Marshall silty clay loam, 2 to 6 percent slopes	8019	Non-Hydric
Marshall silty clay loam, 2 to 6 percent slopes, eroded	8020	Non-Hydric
Marshall silty clay loam, 6 to 11 percent slopes	8024	Non-Hydric
Marshall silty clay loam, 6 to 11 percent slopes, eroded	8025	Non-Hydric
Judson-Nodaway channeled-Contrary complex, 0 to 12 percent slopes	9975	Non-Hydric
Kennebec silt loam, occasionally flooded	8071	Non-Hydric
Lex-Platte complex, occasionally flooded	8073	Non-Hydric
Marshall silty clay loam, 11 to 17 percent slopes, eroded	8079	Non-Hydric
Marshall silty clay loam, 2 to 6 percent slopes	7867	Predominantly Non-Hydric
Marshall silty clay loam, 2 to 6 percent slopes, eroded	7750	Predominantly Non-Hydric
Marshall silty clay loam, 6 to 11 percent slopes	9983	Non-Hydric
Marshall silty clay loam, 6 to 11 percent slopes, eroded	7852	Predominantly Non-Hydric
Mine or quarry	7812	Predominantly Non-Hydric
Monona silt loam, 11 to 17 percent slopes, eroded	3921	Non-Hydric
Monona silt loam, 17 to 30 percent slopes	6708	Non-Hydric
Monona silt loam, 6 to 11 percent slopes, eroded	7641	Non-Hydric
Nodaway silt loam, channeled, frequently flooded	7644	Predominantly Non-Hydric

The NWI and NHD map identifies several wetland and riverine features within the ESB (Appendix A, Figure 3). Wetlands, streams, and open water features identified within the Project ESB were often located within or adjacent to features identified on the NWI and NHD map. A notable watercourse, the Platte River (ID 166132006 and delineated as OMA-S10), intersects the northern portion of the ESB.

Precipitation was analyzed using the USACE APT tool which calculates a three-month rolling precipitation total (USACE 2025a). Precipitation was considered *wetter* than normal prior to the field investigations on September 23-28, 2025; and precipitation was considered *normal* prior to

the field investigations on November 17-19, 2025, and December 22, 2025, as shown in the precipitation figures in Appendix B.

3.2 WETLANDS

Stantec identified and delineated nine wetlands within the ESB during the 2025 field investigations. Wetland determination data forms were completed for sample points along transects through the wetlands and adjacent uplands and are contained in Appendix C. Photographs of the wetland communities and adjacent lands are contained in Appendix D. The wetland boundary and sample point locations are shown on Appendix A, Figure 4. The wetlands are summarized in Table 2 and described in detail in the following sections.

Table 2. Summary of Wetlands Identified within the ESB

Wetland ID	Wetland Classification		Federal Jurisdictional Determination[1]	Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39			
OMA-W01	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	OMA-OW02, OMA-OW04, OMA-S11	4.10
OMA-W02	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.02
OMA-W03	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.03
OMA-W04	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.01
OMA-W05	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.01
OMA-W06	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.01
OMA-W07	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.31
OMA-W08	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	No	0.93
OMA-W09	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	OMA-S02	0.19

[1]Jurisdictional determination per USACE determination 33 CFR Part 328 on November 13, 1987

Palustrine Emergent Wetlands (Degraded Wet Meadow)

Palustrine emergent (PEM) wetlands identified onsite were characterized as wet meadows which usually lack standing water throughout most of the growing season but are saturated within a few inches of the surface. Vegetation typically includes grasses, sedges, rushes, and short broad-leaved plants. Wet meadow wetlands within the ESB were considered degraded due to a dominance of invasive species such as reed canary grass, recurring farm practices within or adjacent to the wetland, and/or a location within roadside ROW.

All nine PEM wetlands identified within the ESB were characterized as degraded wet meadow communities. The wetlands were primarily dominated by reed canary grass. Other present species often included barnyard grass (*Echinochloa crus-galli*), water smartweed (*Persicaria pensylvanica*), tall scouring rush (*Equisetum praealtum*), prairie cord grass (*Spartina pectinata*), grass-leaved goldenrod (*Euthamia graminifolia*), yellow foxtail (*Setaria pumila*), and shining flatsedge (*Cyperus bipartitus*). Wetlands were observed to meet primary hydrology indicators Sparsely Vegetated Concave Surface (B8) and Oxidized Rhizospheres on Living Roots (C3), and secondary hydrology indicators Geomorphic Position (D2) and a positive FAC-neutral test (D5). Observed hydric soil indicators included Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6).

3.3 UPLAND

Uplands consisted of agricultural cropland, pastureland, open land/grassland, prairies, maintained (ROW), mixed hardwood forests, and residential lots/farmsteads. Dominant plant species identified in the upland areas were smooth brome (*Bromus inermis*), yellow foxtail, Kentucky bluegrass (*Poa pratensis*), hackberry (*Celtis occidentalis*), bur oak (*Quercus macrocarpa*), American elm (*Ulmus americana*), and sumac (*Rhus* spp.*)*. Agricultural areas were predominately corn (*Zea mays*) and soy fields (*Glycine max*).

Soils in each upland area are mapped by the NRCS and depicted on Appendix A, Figure 2, and are also listed on the data sheets found in Appendix C. Typically, indicators of hydric soils were not observed within upland soil samples. Occasionally, soils met hydric soil indicators Depleted Below Dark Surface (A11), Depleted Matrix (F3), and Redox Dark Surface (F6) often just outside of wetland boundaries or in depressions within agricultural fields. When hydric soils were met in an upland, wetland hydrology or hydrophytic vegetation criteria were not met.

No primary indicators of hydrology were observed in the upland areas, and the uplands were found at similar or higher elevations than the wetland.

3.4 WATERWAYS

The 2025 field investigations identified 11 waterways within the Project ESB. Characteristics of these waterways are summarized in Table 3 and are depicted on Appendix A, Figure 4.

Table 3. Summary of Waterways Identified within the ESB

Waterway ID	Flow Class	Height of Bank (feet)[1]	Top of Bank Width of Stream (feet)[1]	Water Depth (feet)[1]	Associated Surface Waters	Acreage within the ESB
OMA-S01	Intermittent	4	14	0.25	No	0.17
OMA-S02	Intermittent	16	20	2	OMA-W09	0.34
OMA-S03	Perennial	32	40	1	OMA-S07	2.38
	Intermittent	25	32	0	OMA-S04, OMA-W07	4.08

Waterway ID	Flow Class	Height of Bank (feet)[1]	Top of Bank Width of Stream (feet)[1]	Water Depth (feet)[1]	Associated Surface Waters	Acreage within the ESB
OMA-S04	Intermittent	24	20	0	OMA-S03	0.49
OMA-S05	Intermittent	2	3	0	OMA-S06	0.42
OMA-S06	Intermittent	10	12	0	OMA-S05	0.14
OMA-S07	Intermittent	4	7	0	OMA-S03	0.37
OMA-S08	Intermittent	25	24	0	OMA-S10 (Platte River)	1.12
OMA-S09	Intermittent	30	25	0	No	0.45
OMA-S10 (Platte River; ID 166132006)	Perennial	20	2,030	6	OMA-S08	90.14
OMA-S11	Perennial	50	12	1	OMA-W01, OMA-OW02, OMA-OW04,	4.43

[1]Waterway bank and depth measurements are approximate

3.5 WATERBODIES

The 2025 field investigations identified four waterbodies within the Project ESB. Characteristics of the waterbodies are summarized in Table 4 and are depicted on Appendix A, Figure 4.

Table 4. Summary of Waterbodies Identified within the ESB

Waterbody ID	Type	Adjacent Surface Waters	Acreage within the ESB
OMA-OW01	Excavated Pond	No	3.37
OMA-OW02	Excavated Pond	OMA-W01, OMA-S11, OMA-OW04	0.75
OMA-OW03	Excavated Pond	No	0.42
OMA-OW04	Shallow Open Water Pond	OMA-W01, OMA-S11, OMA-OW02	0.33

3.6 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways within the ESB. However, there may be other regulated environmental features within the ESB, including, but not limited to, historical or archeological features, endangered or threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or

restrict land uses within or in close proximity to these features. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

4.0 CONCLUSION

Stantec performed a wetland delineation on behalf of Northern for the Central Mainline Corridor Expansion Project – Omaha 3rd branch line loop. The purpose and objective were to identify the extent and spatial arrangement of wetlands and waterways within the ESB.

During the 2025 field investigations, nine wetlands, eleven waterways, and four waterbodies were identified and delineated within the ESB in accordance with state and federal guidelines and were subsequently surveyed with GNSS and mapped using GIS software. There was a combined total of 5.61 acres of wetlands, 104.53 acres of waterways, and 4.87 acres of open water waterbodies delineated within the ESB. Identified PEM wetlands were characterized as degraded wet meadow wetland communities. Identified waterways were classified as intermittent and perennial streams, and waterbodies were classified as excavated ponds and shallow open water ponds. Adjacent uplands were primarily composed of active agricultural fields, upland forests, riverine sandplains, pastureland/grassland, and road ROW.

Water resources that are considered waters of the U.S.(WOTUS) are subject to regulation under Section 404 of the Clean Water Act and the jurisdictional regulatory authority lies with the USACE as well as the NDWEE.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that Northern obtain the necessary permits or other regulatory review and concurrence with regard to the proposed project to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present within the ESB at the time of the fieldwork. Experienced and qualified professionals performed the delineation using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE and, in some cases, the NDWEE or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the ESB can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the ESB.

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Appendix A – Figures

Figure 1. Project Location

Figure 2. NRCS Soil Survey Data w/Hydric Rating

Figure 3. National Wetlands Inventory and National Hydrography Dataset

Figure 4. Field Collected Data

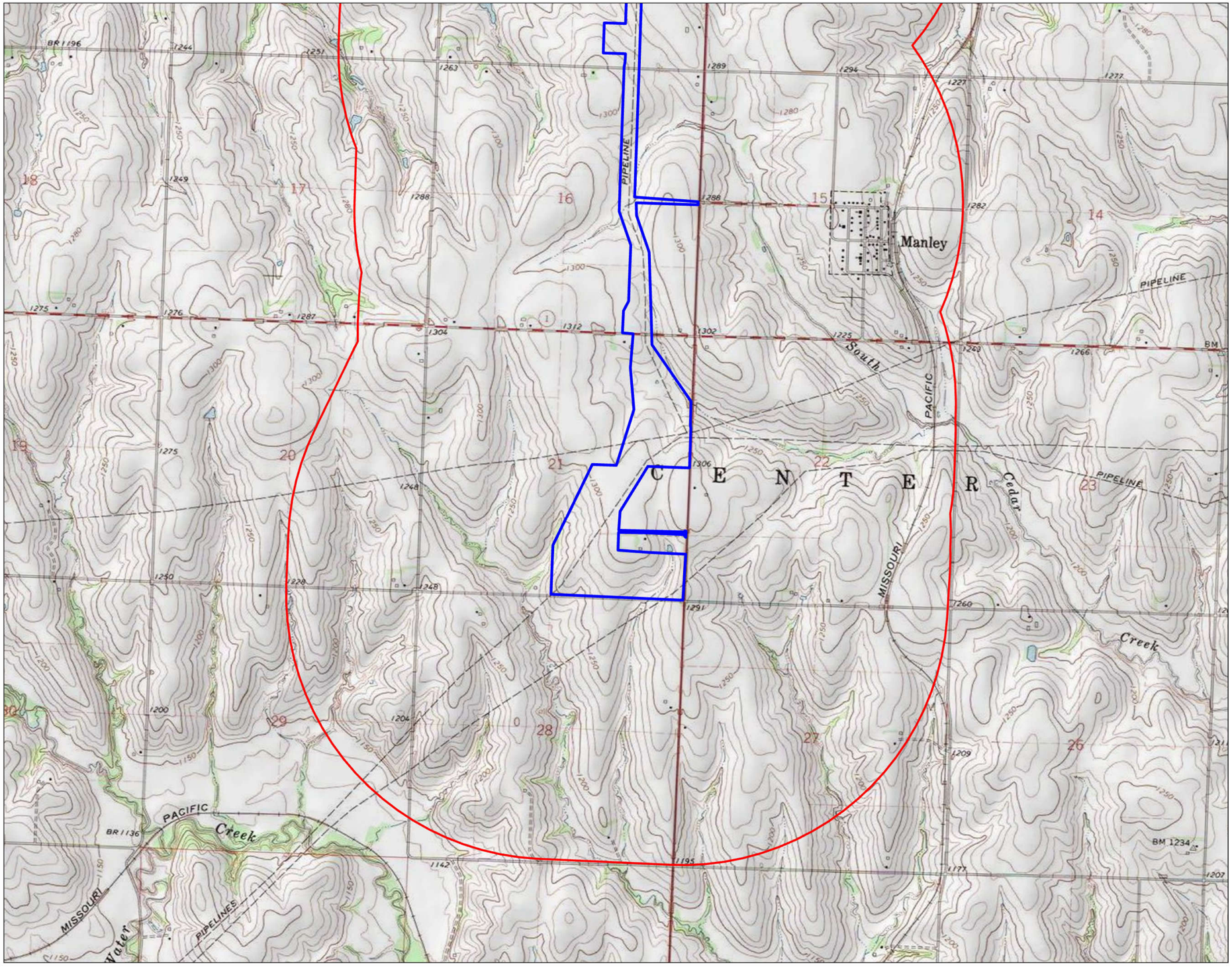

Figure No.
1

Title
Project Location & 1-Mile Buffer
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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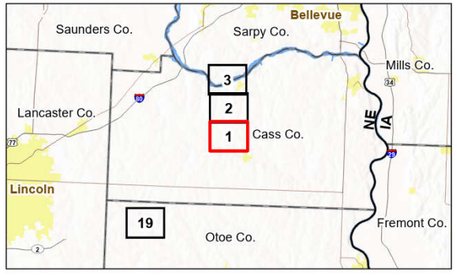
Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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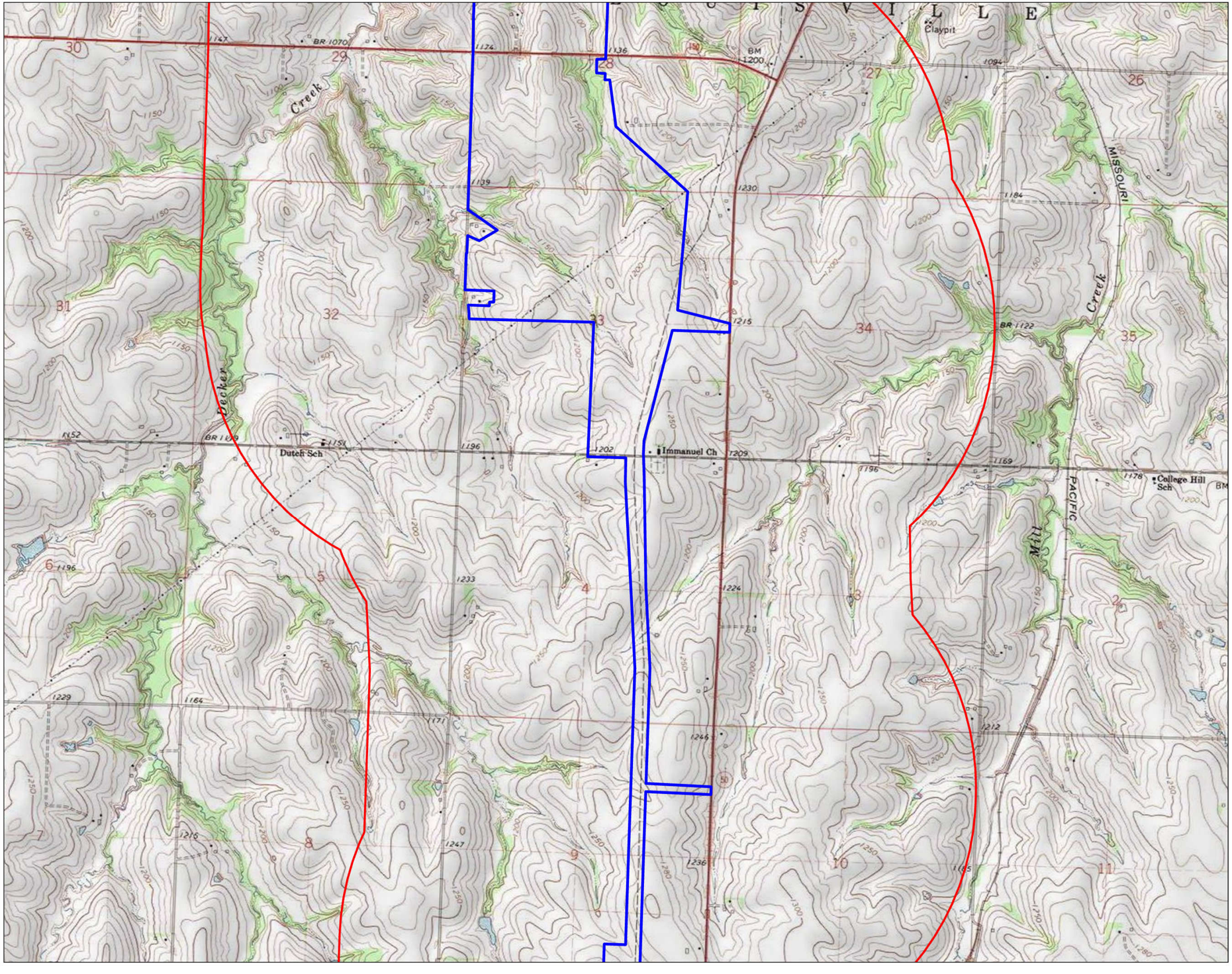

Figure No.

1

Title

Project Location & 1-Mile Buffer
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center & Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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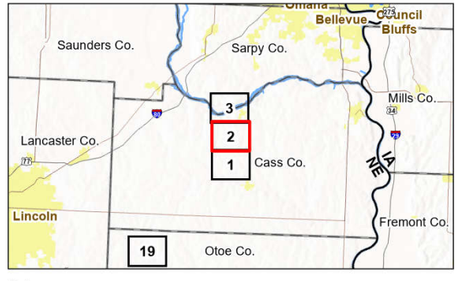
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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Figure No.

1

Title

Project Location & 1-Mile Buffer
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville & Platford-Springfield II
Sarpy & Cass Counties, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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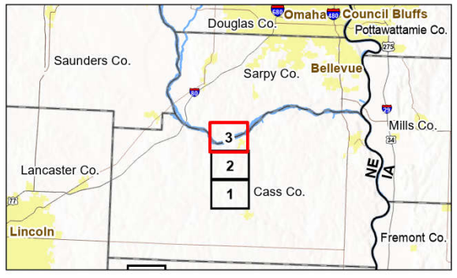
Legend

- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

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Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet

(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

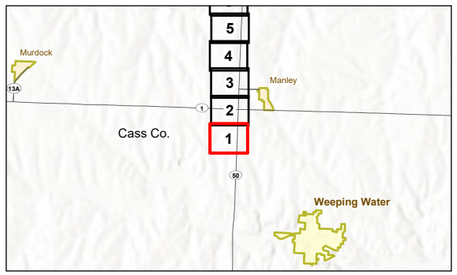
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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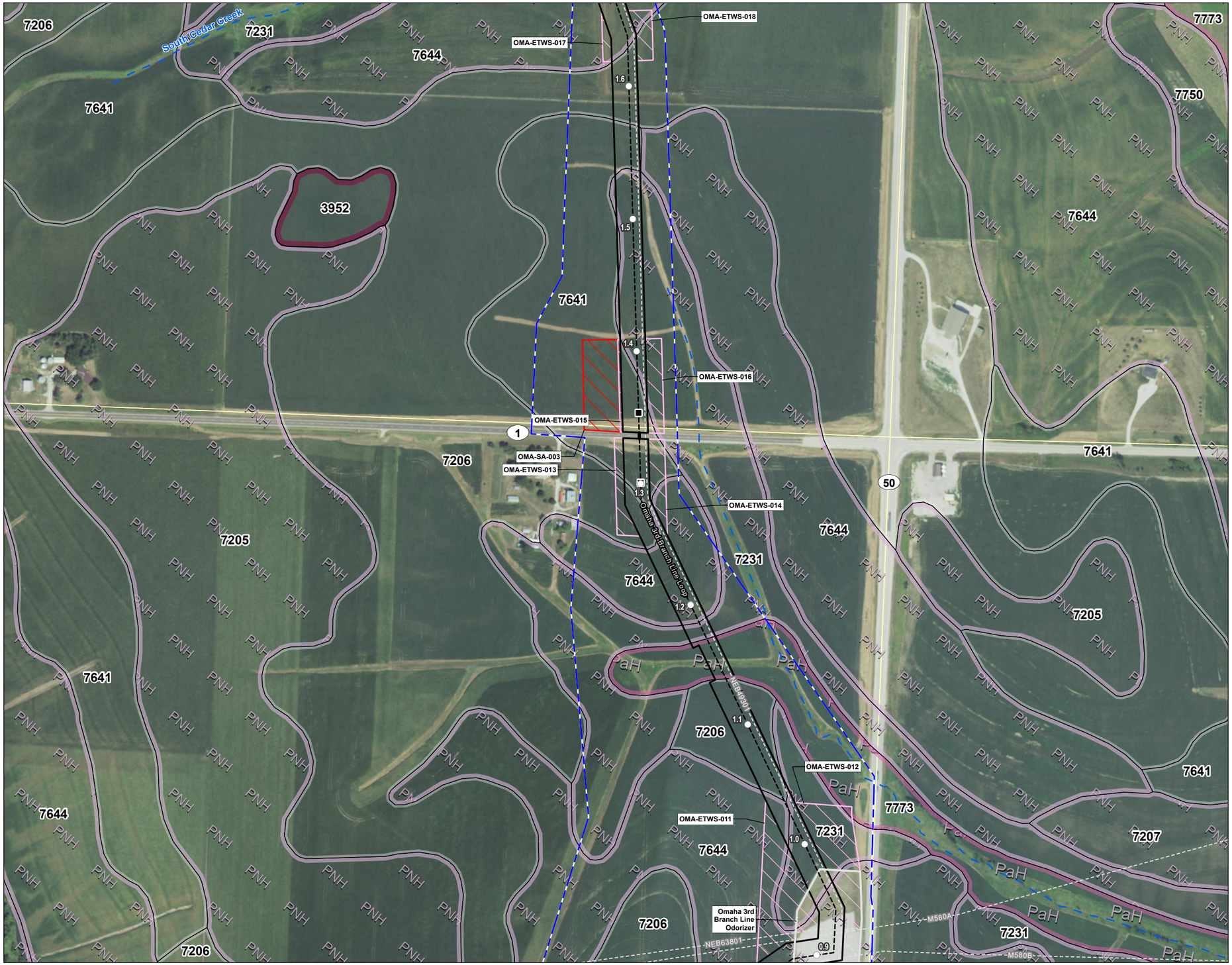

Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

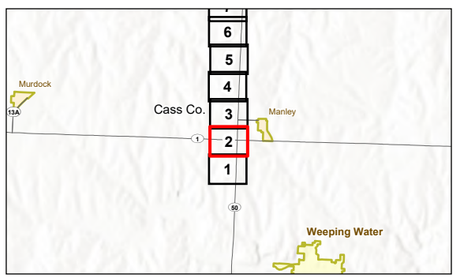
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.
2

Title
NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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(At original document size of 11x17)
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Legend
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- Existing Pipeline
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- Temporary Workspace
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- Temporary Access Road

NRCS Soil Survey Data
Hydric Soil Rating
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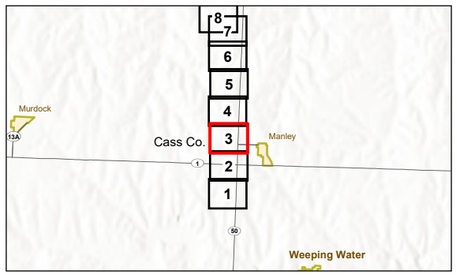
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Northern Natural Gas

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Revised: 2026-03-26 By: jmarty
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Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
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- Staging Area

NRCS Soil Survey Data

Hydric Soil Rating

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- Predominantly Hydric (PrH)
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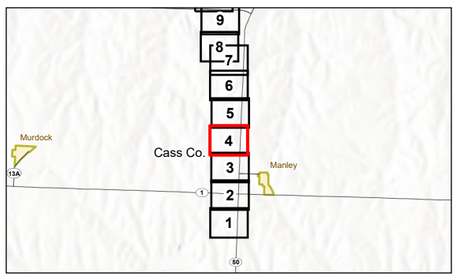
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace

NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
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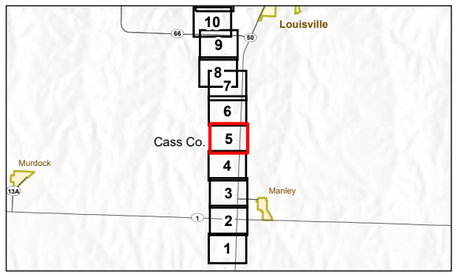
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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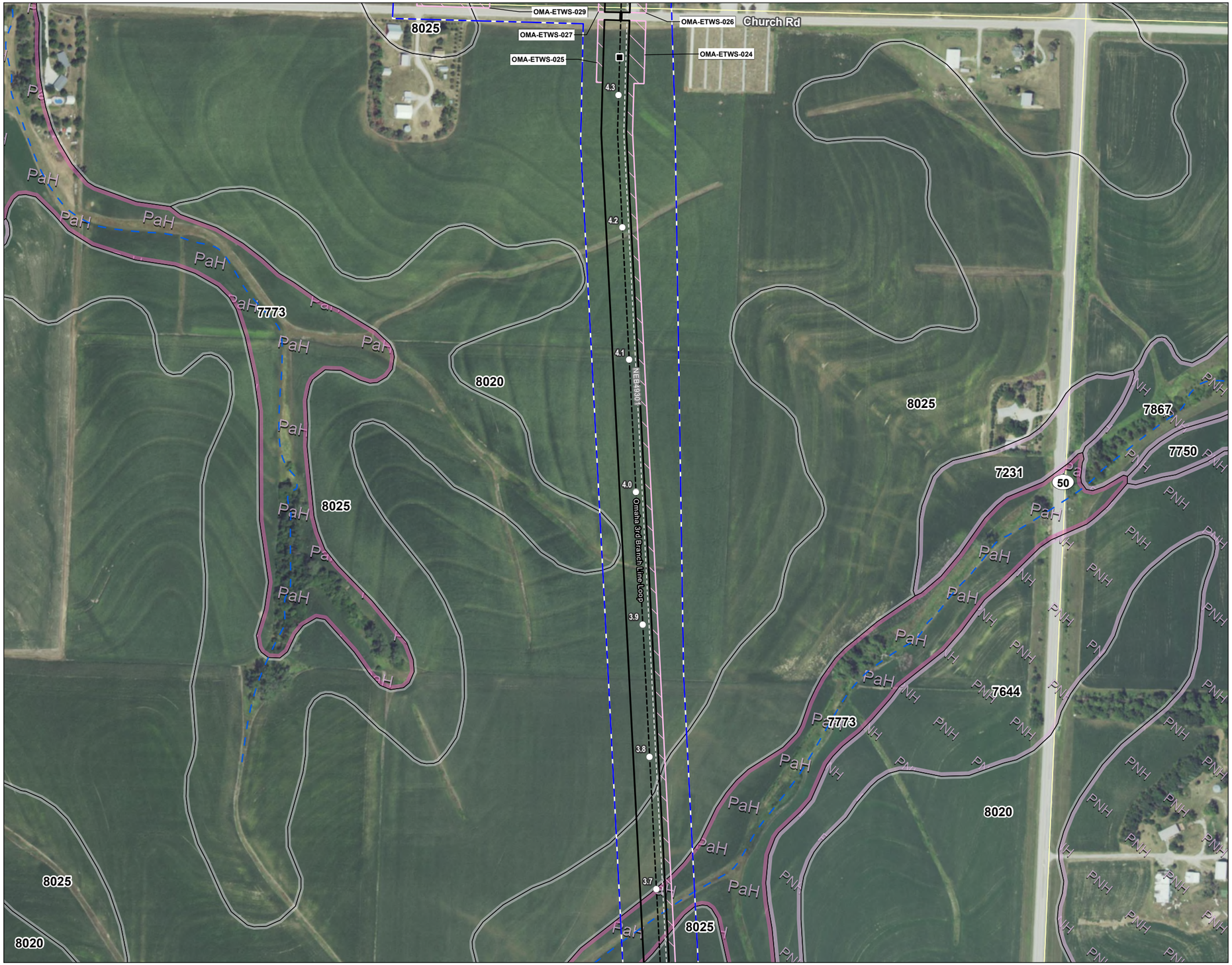

Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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(At original document size of 11x17)
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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace

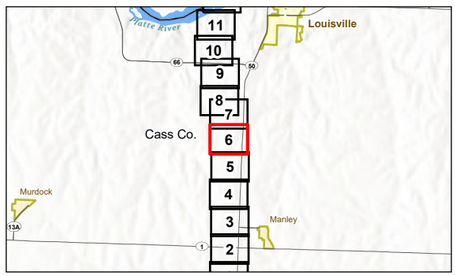
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace

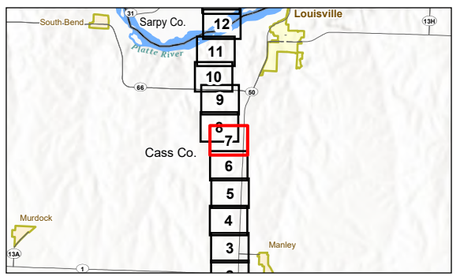
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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Stantec

Northern Natural Gas

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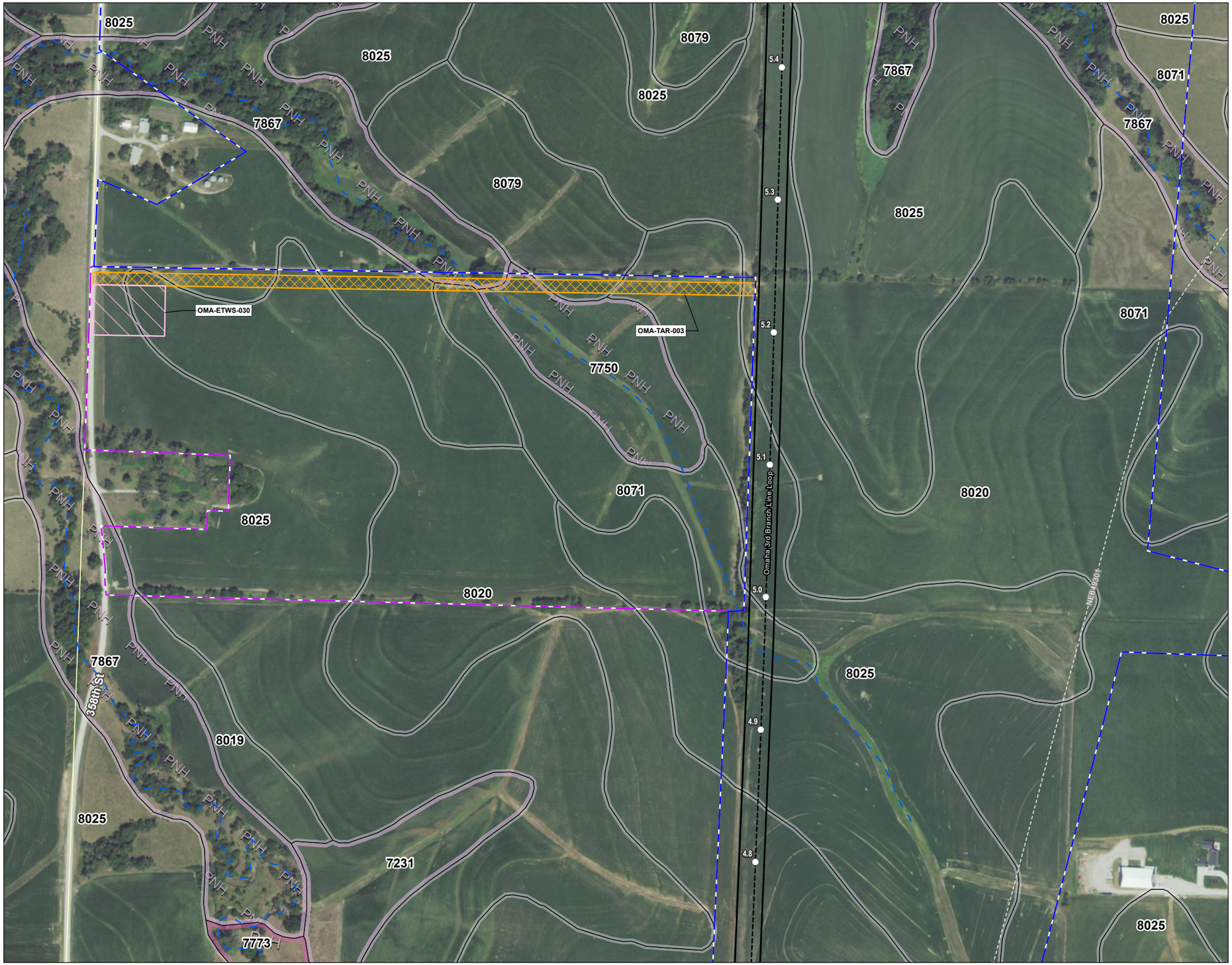

Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road

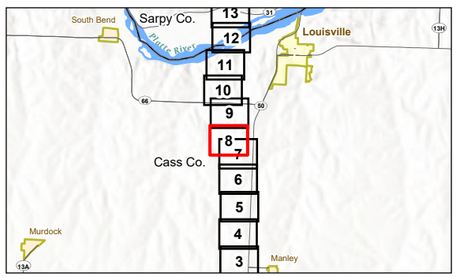
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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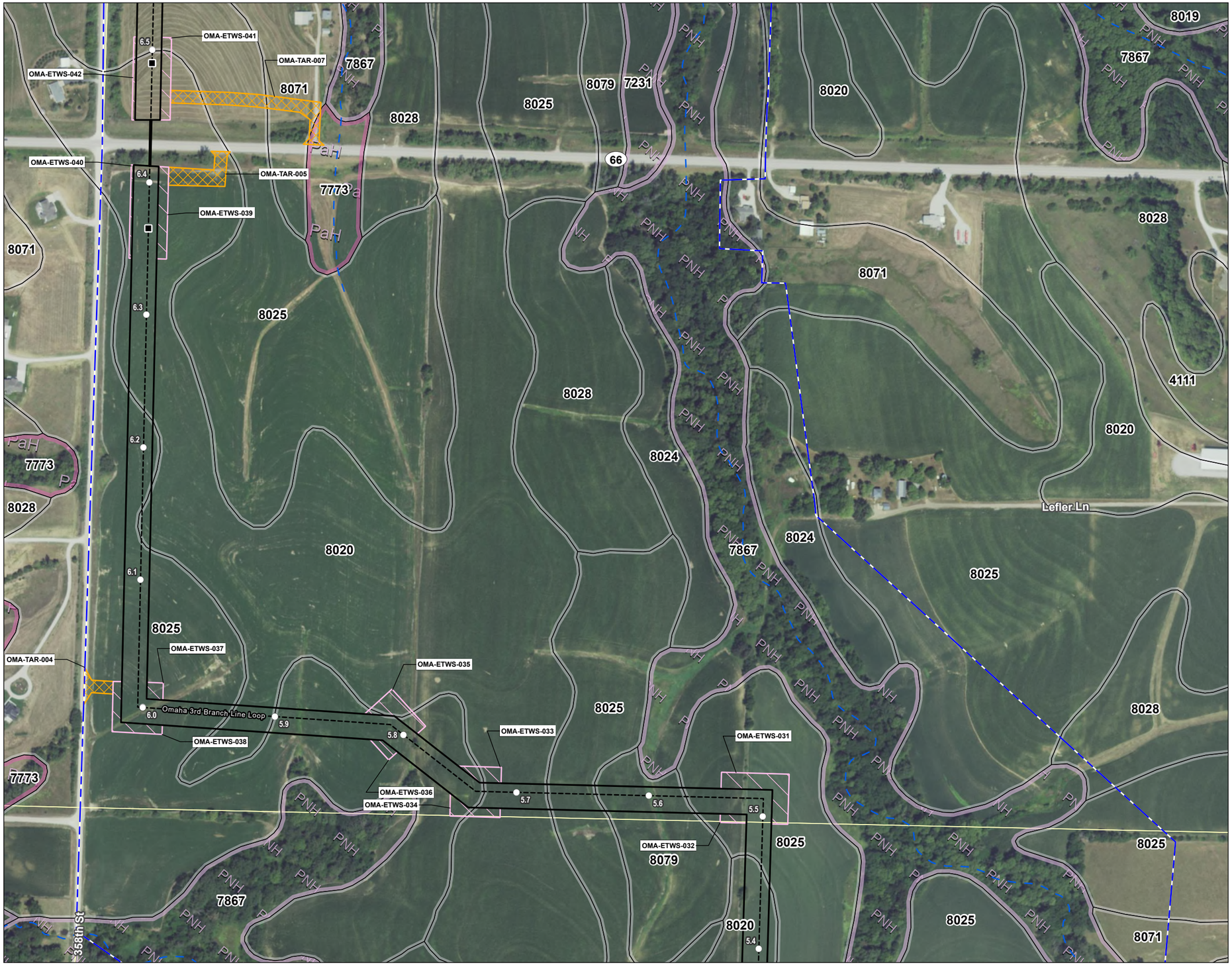

Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road

NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
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National Hydrography Dataset

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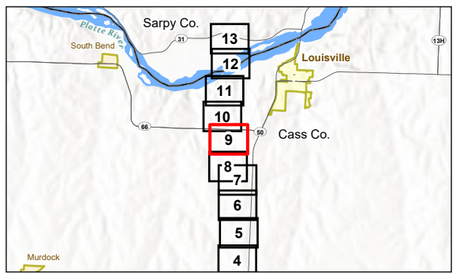

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Stantec

Northern Natural Gas

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Figure No.
2

Title
NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
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NRCS Soil Survey Data
Hydric Soil Rating
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- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
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National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
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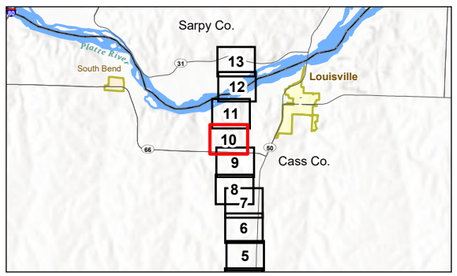
- Waterbody



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Northern Natural Gas

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Revised: 2026-03-26 By: jmarty
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Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
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NRCS Soil Survey Data

Hydric Soil Rating

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National Hydrography Dataset

- Perennial Stream
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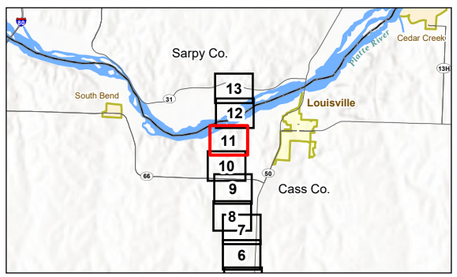

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Northern Natural Gas

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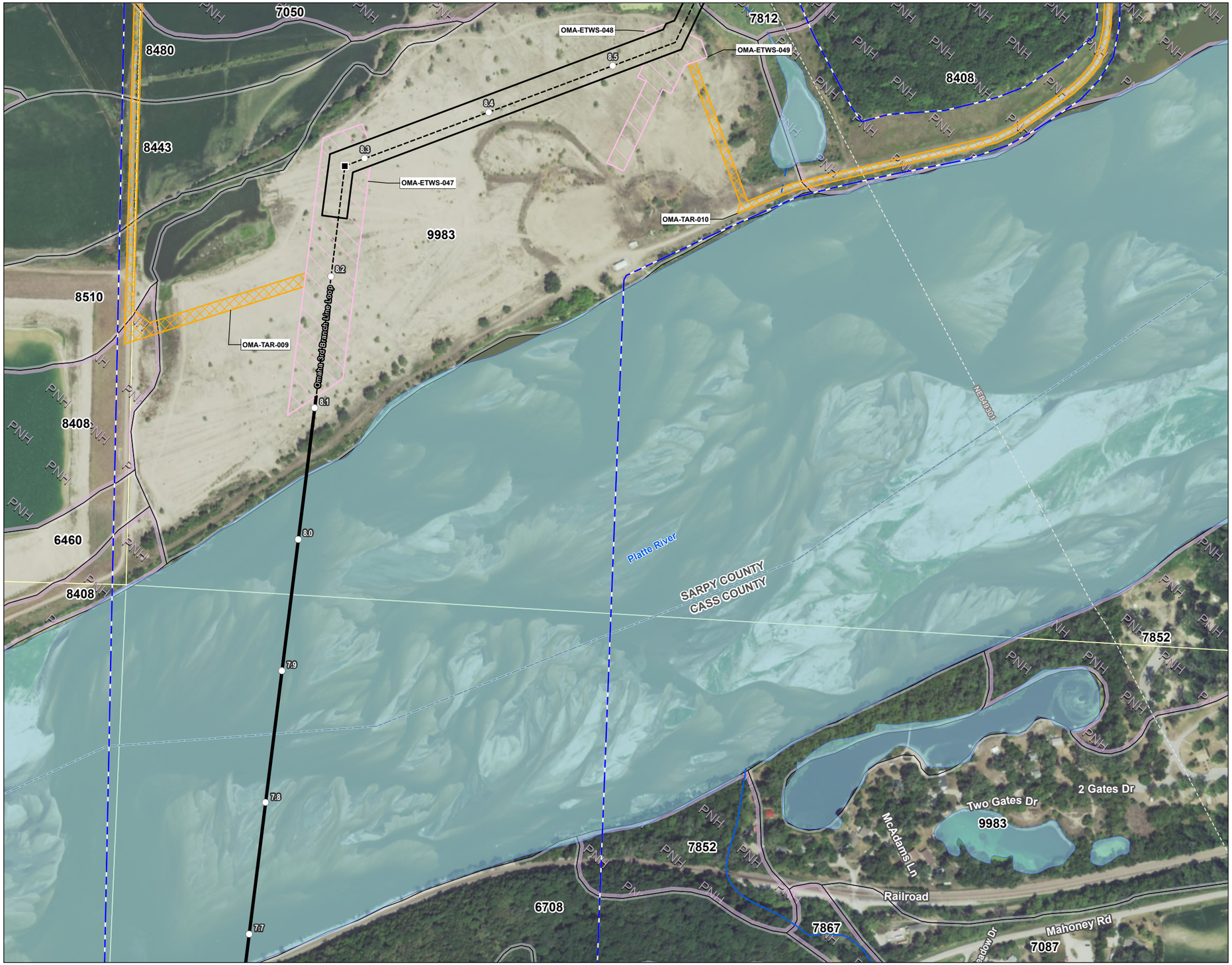

Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy & Cass Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road

NRCS Soil Survey Data

Hydric Soil Rating

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- Predominantly Hydric (PrH)
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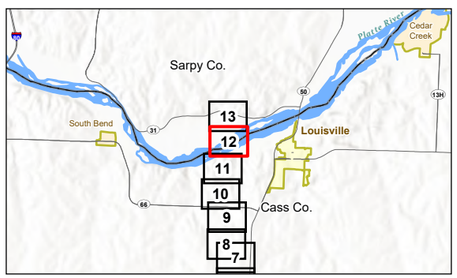
National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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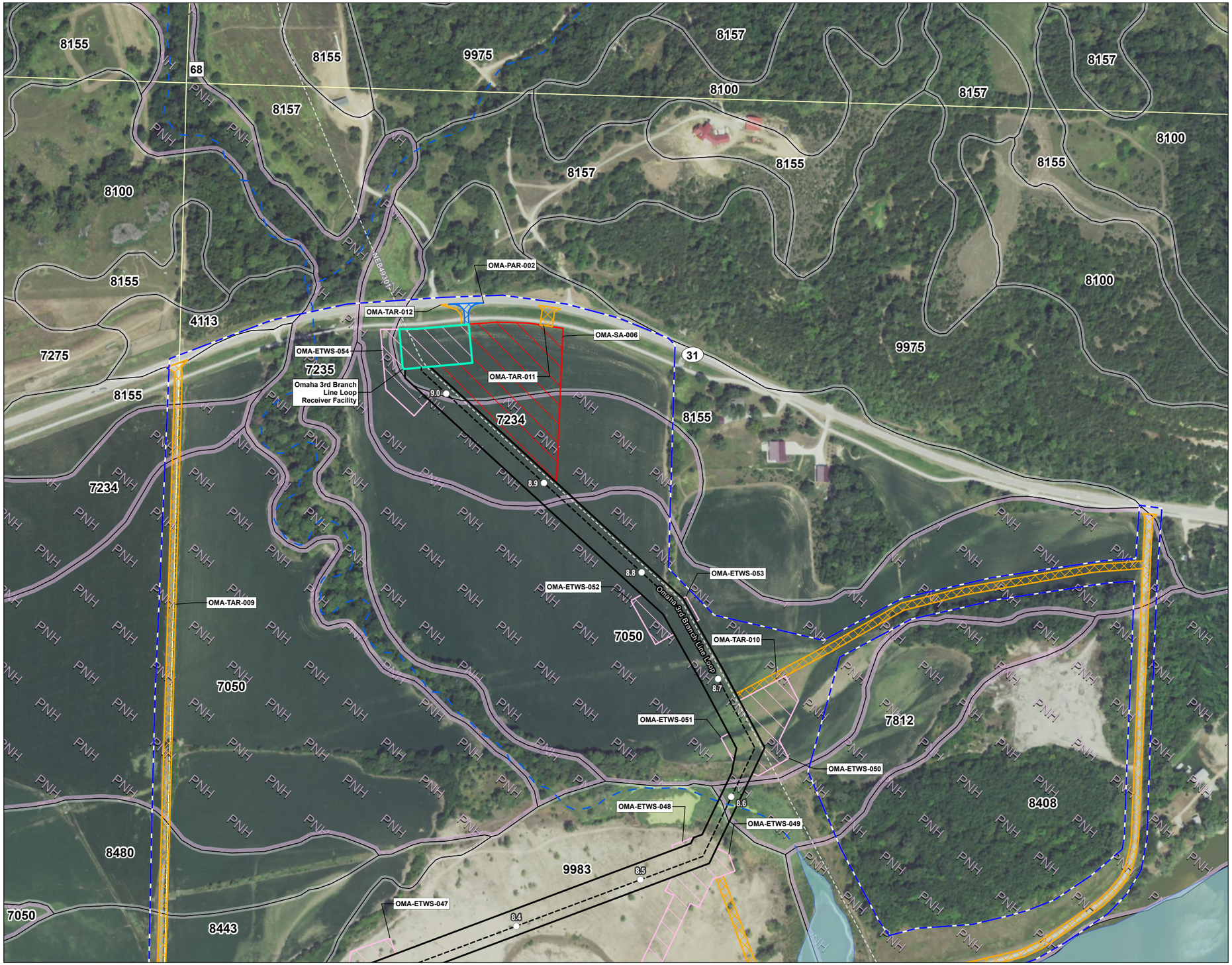

Figure No.

2

Title

NRCS Soil Survey Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
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Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
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- Staging Area

NRCS Soil Survey Data

Hydric Soil Rating

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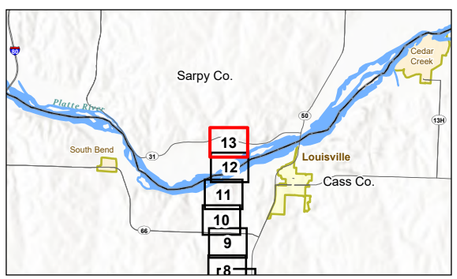
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172601\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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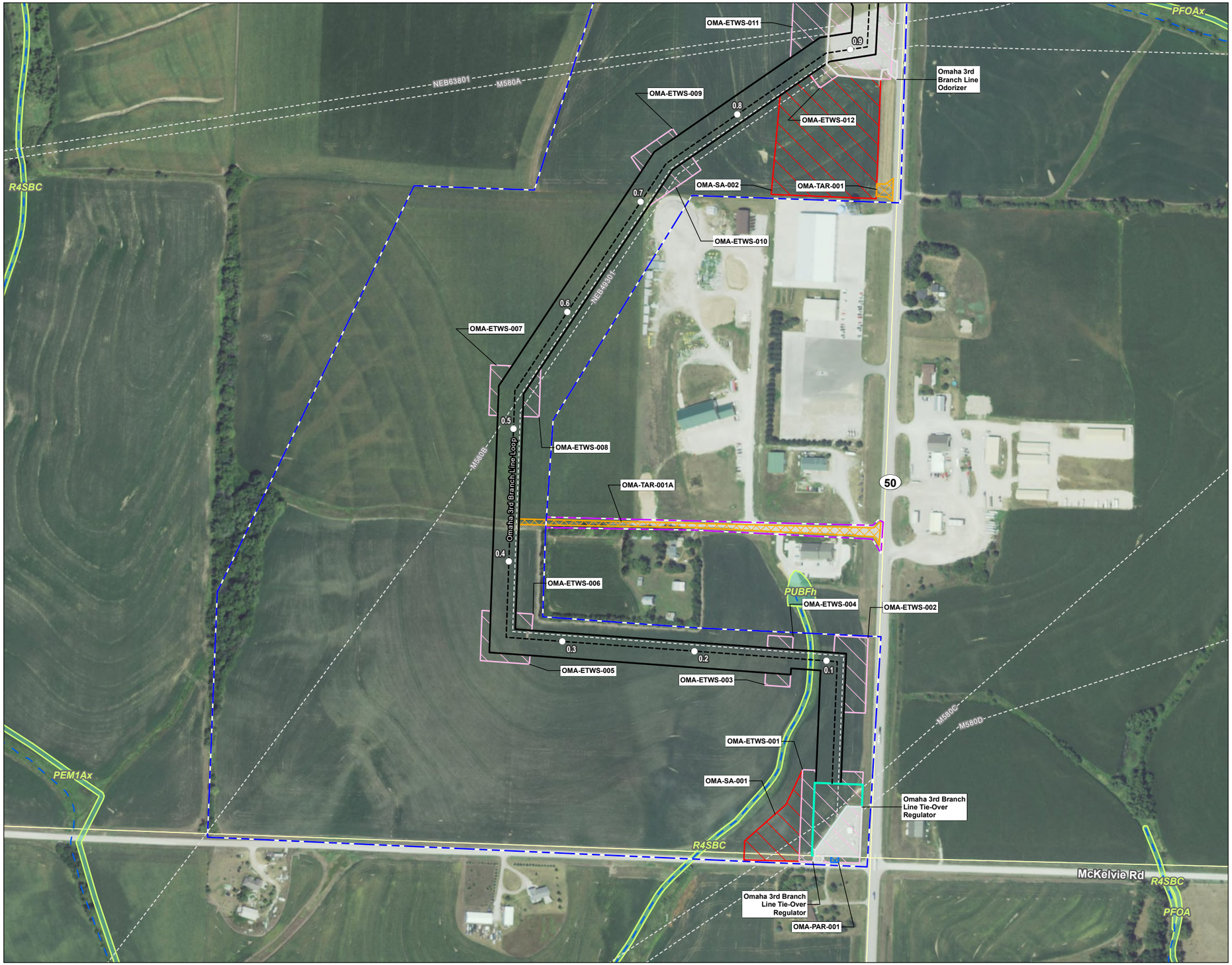


Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

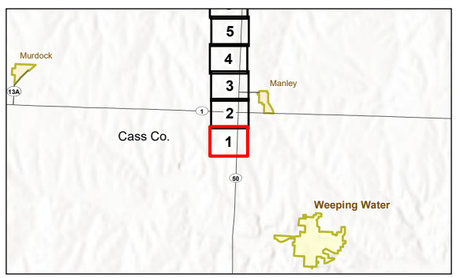
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172611\726092211\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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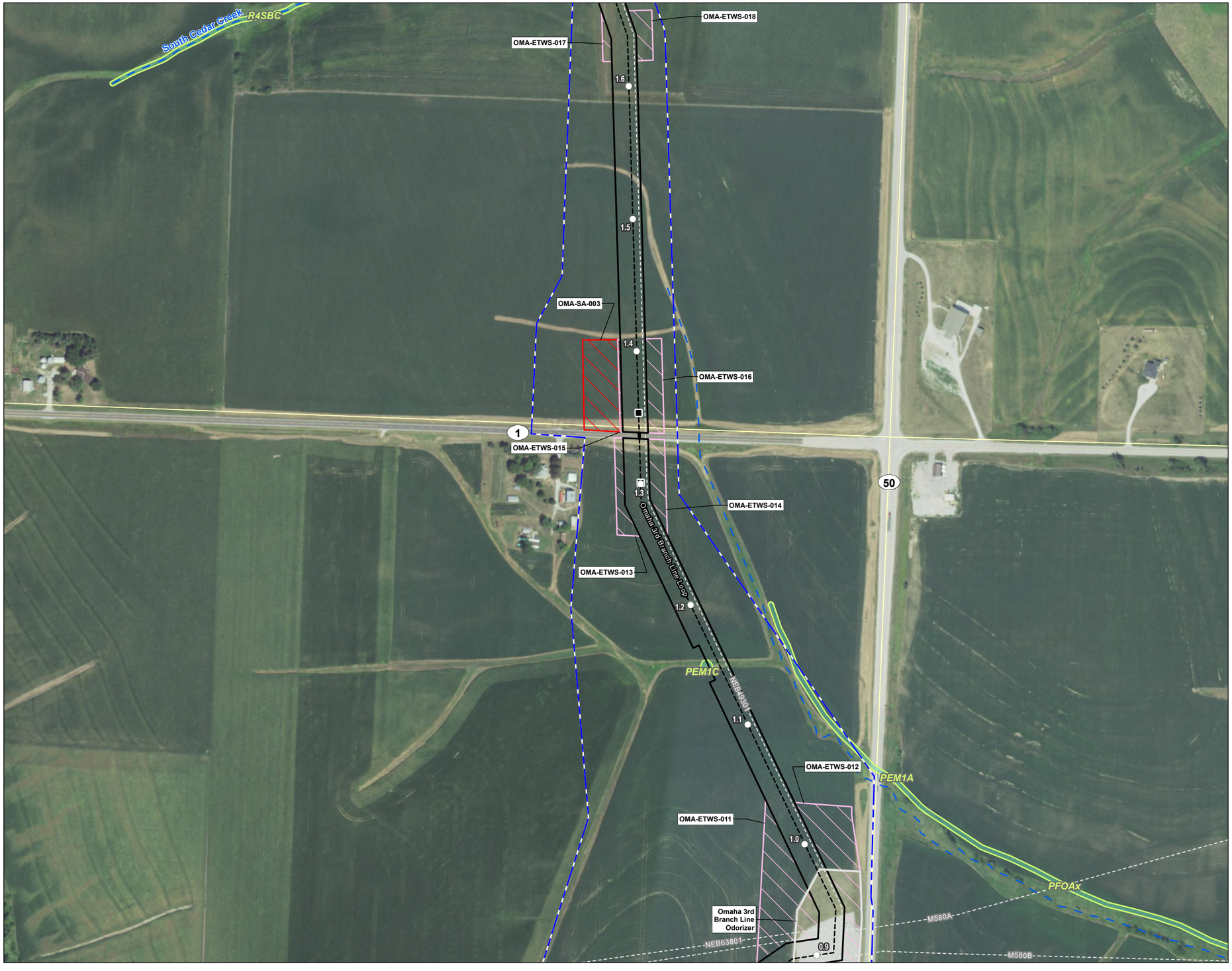

Figure No.
3

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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Legend
- Mile Post
- HDD
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- Staging Area
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National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
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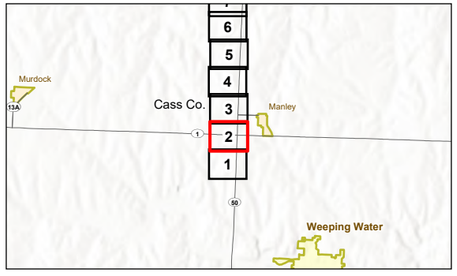

Notes
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Northern Natural Gas

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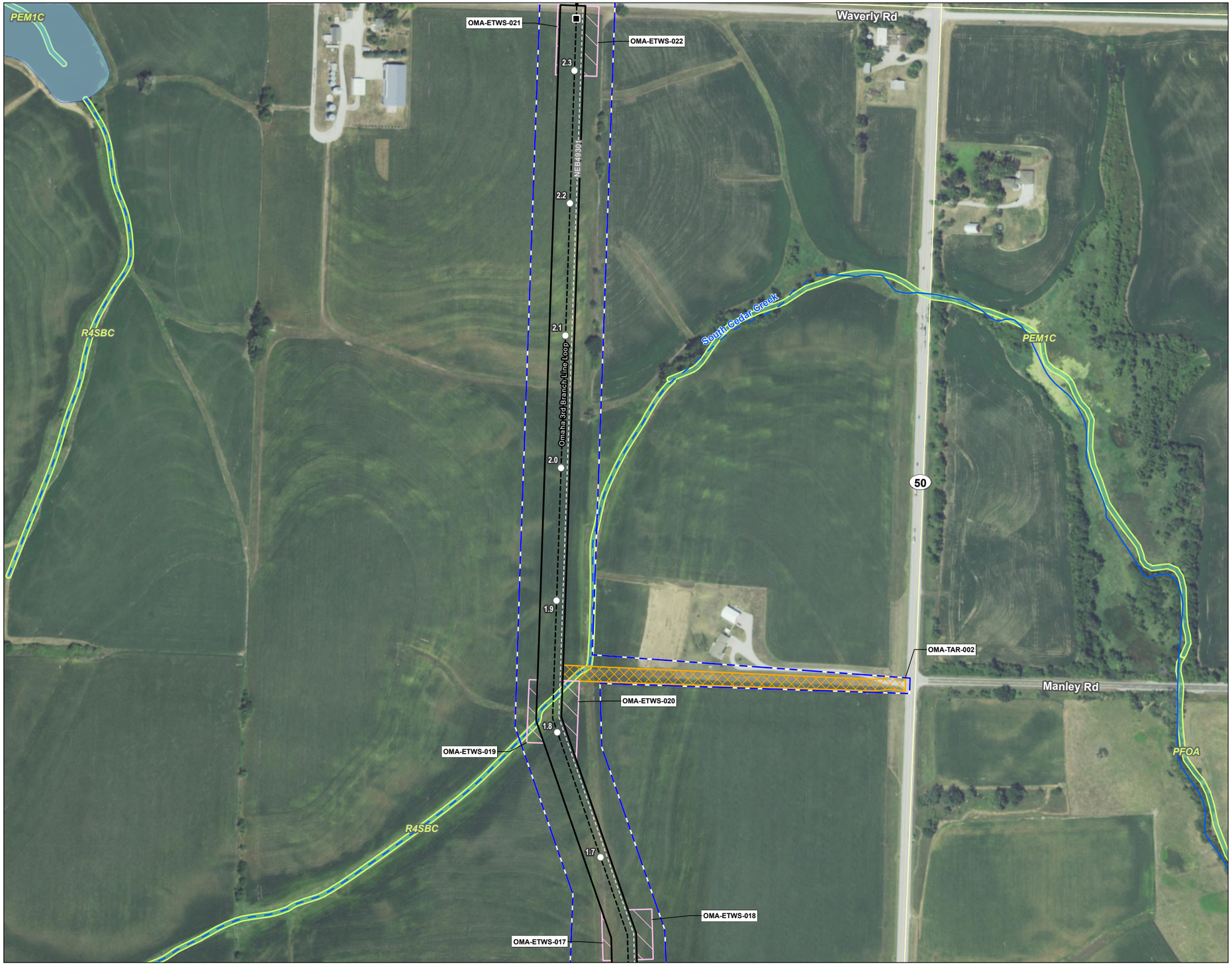

Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
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Legend

- Mile Post
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- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
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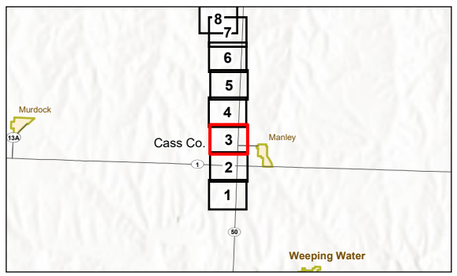

Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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National Hydrography Dataset

- Perennial Stream
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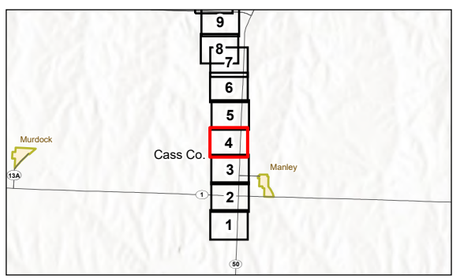
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

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Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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Legend

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- Extra Temporary Workspace
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National Hydrography Dataset

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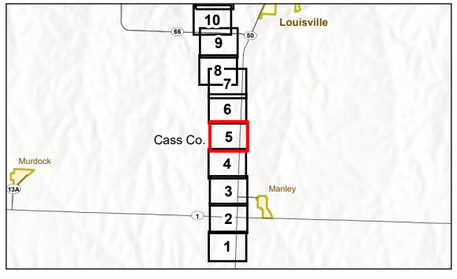

Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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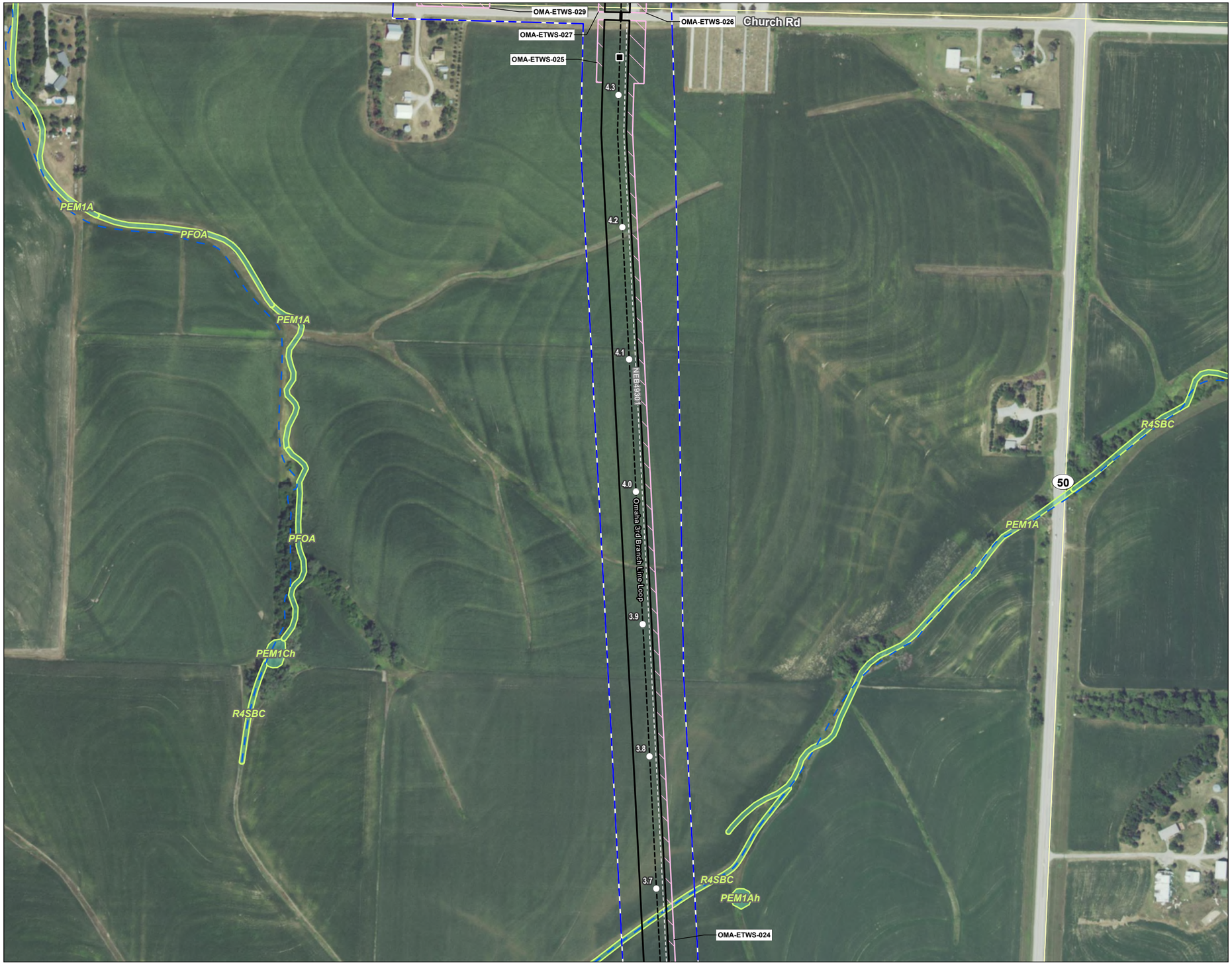

Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
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National Hydrography Dataset

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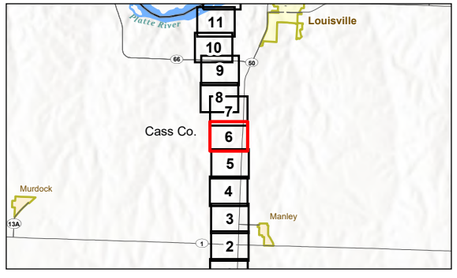

Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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Legend

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- Perennial Stream
- Intermittent Stream
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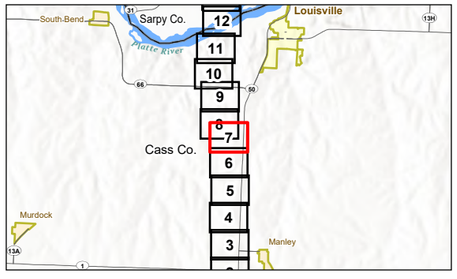

Notes
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Northern Natural Gas

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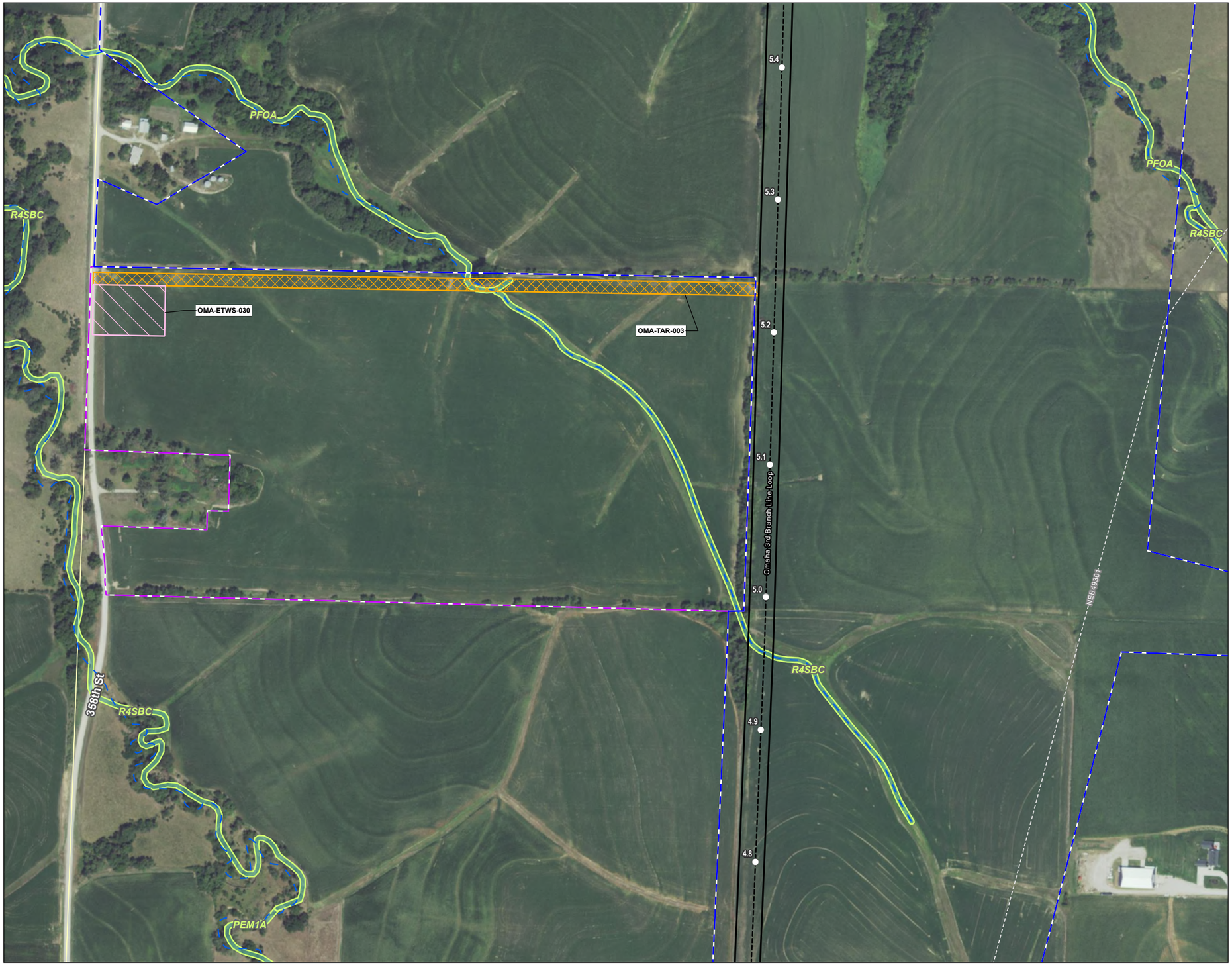

Figure No.
3

Title
National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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Legend
- Mile Post
- Proposed Pipeline
- Existing Pipeline
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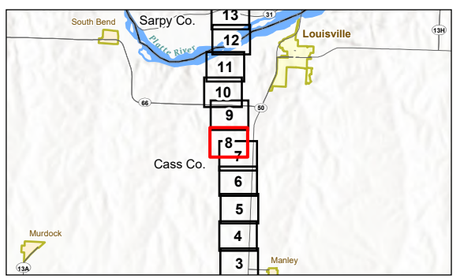

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Northern Natural Gas

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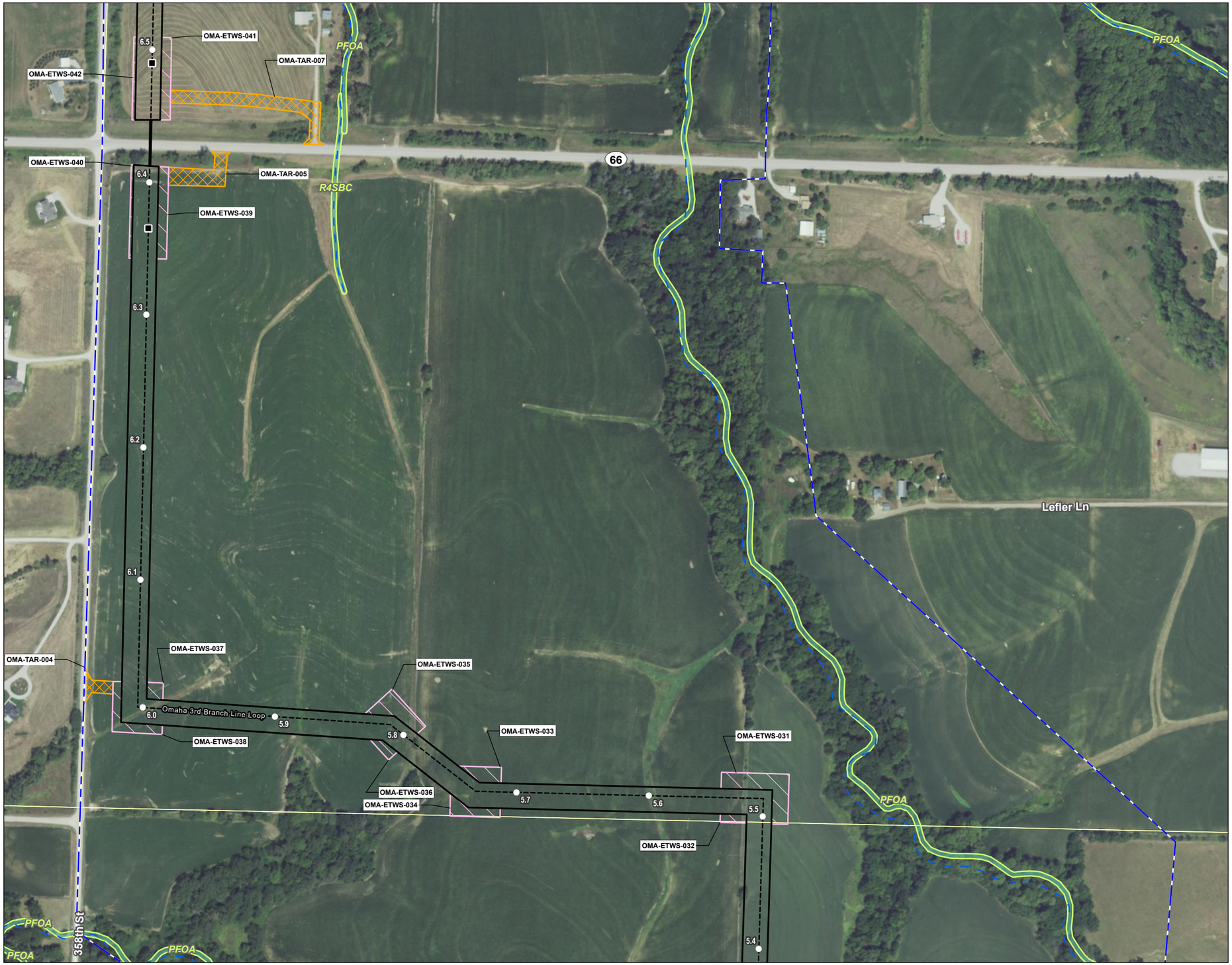

Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
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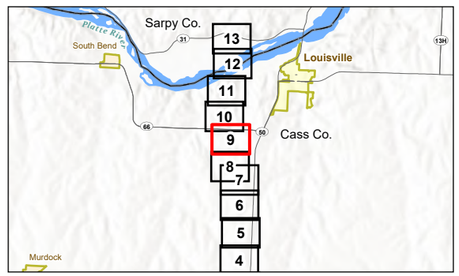

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Northern Natural Gas

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Figure No.

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Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
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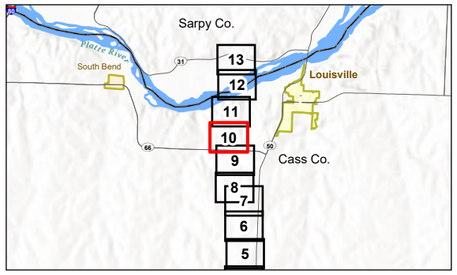

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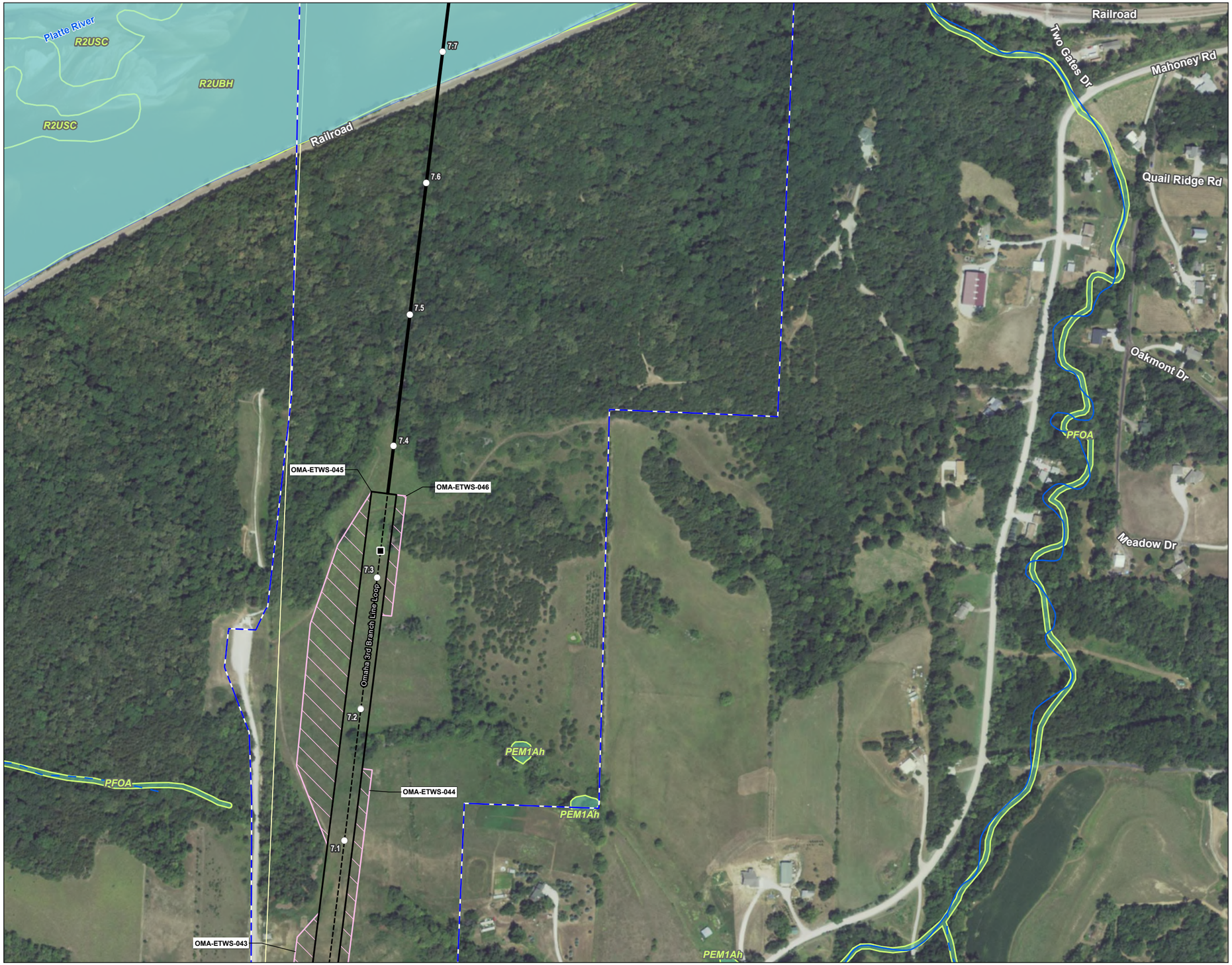

Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

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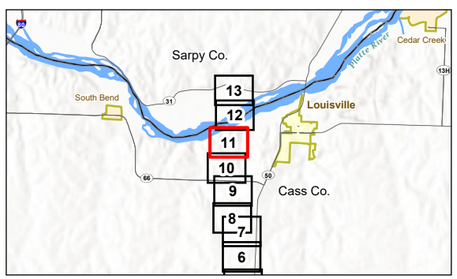

Notes
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Northern Natural Gas

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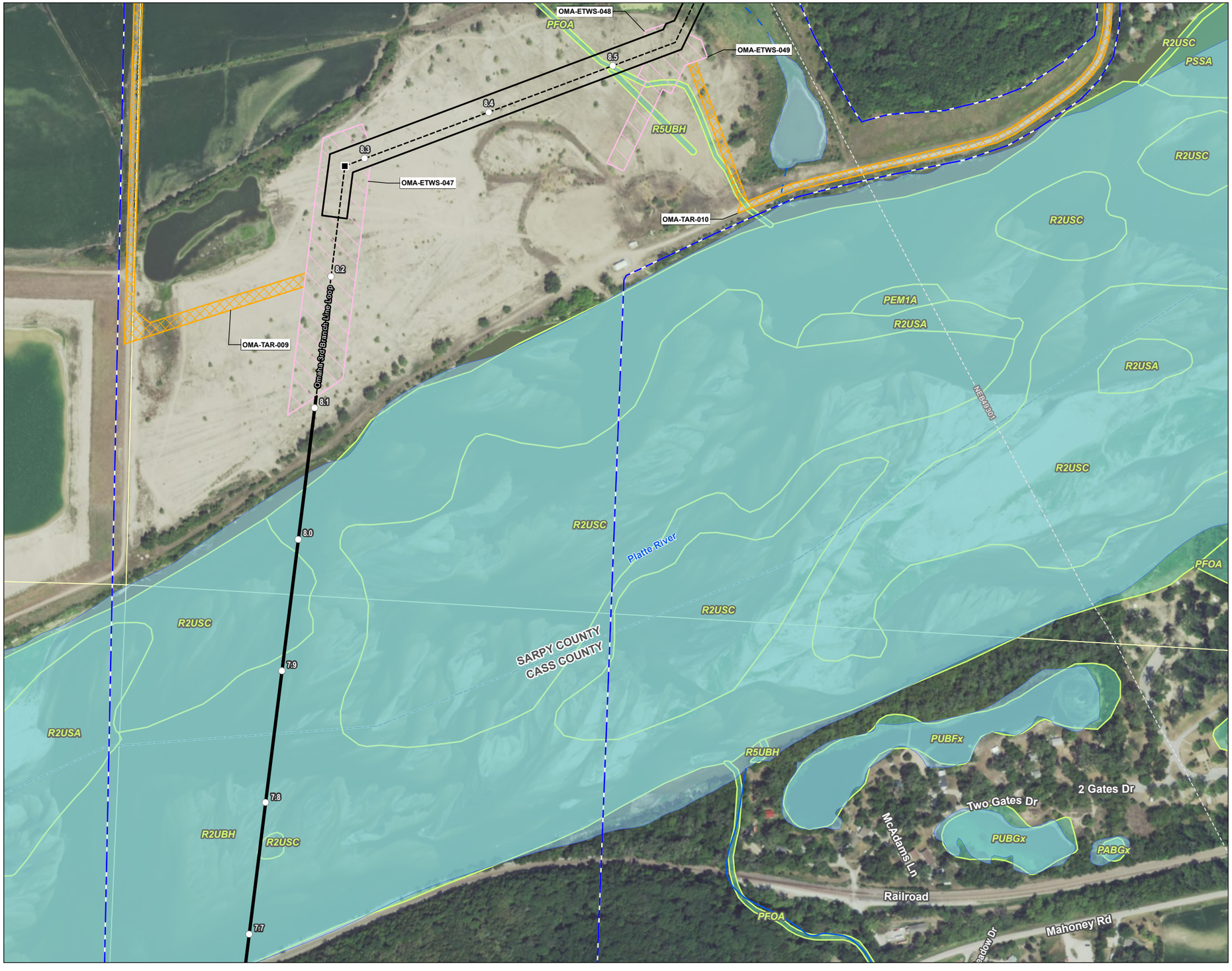

Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy & Cass Counties, Nebraska

Prepared by JM on 2026-02-09
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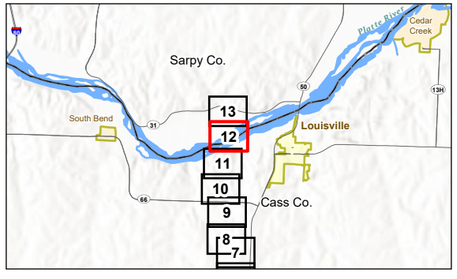
- Extra Temporary Workspace
- Temporary Access Road
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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U:\172611726092211\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

Figure No.

3

Title

National Wetlands Inventory
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

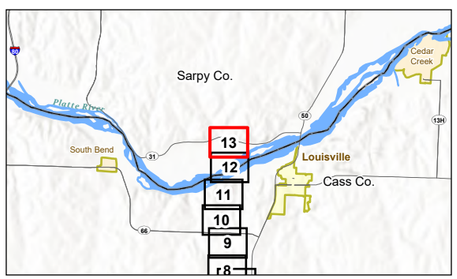
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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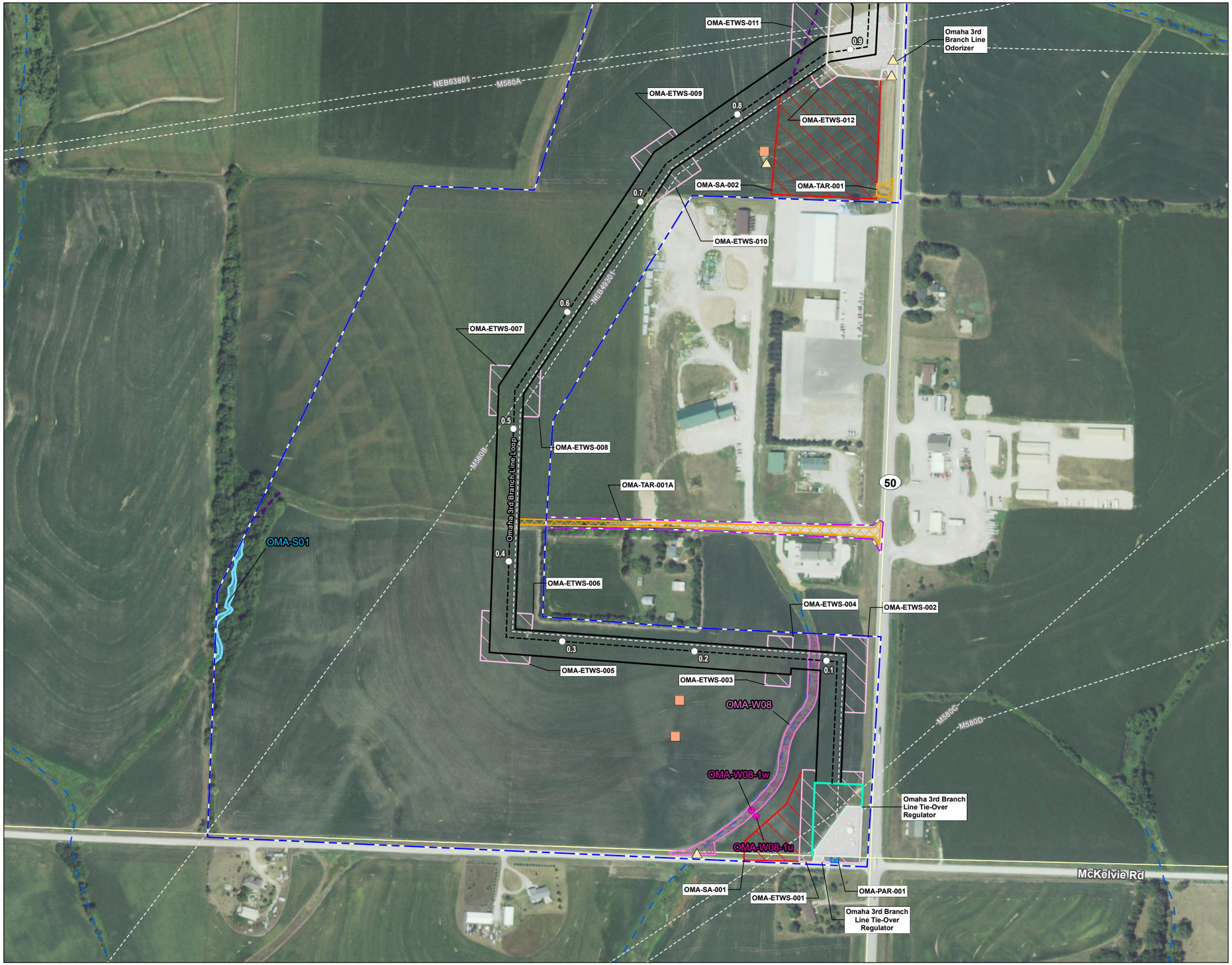


Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

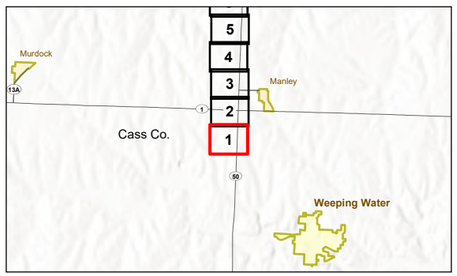
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Storm Drain
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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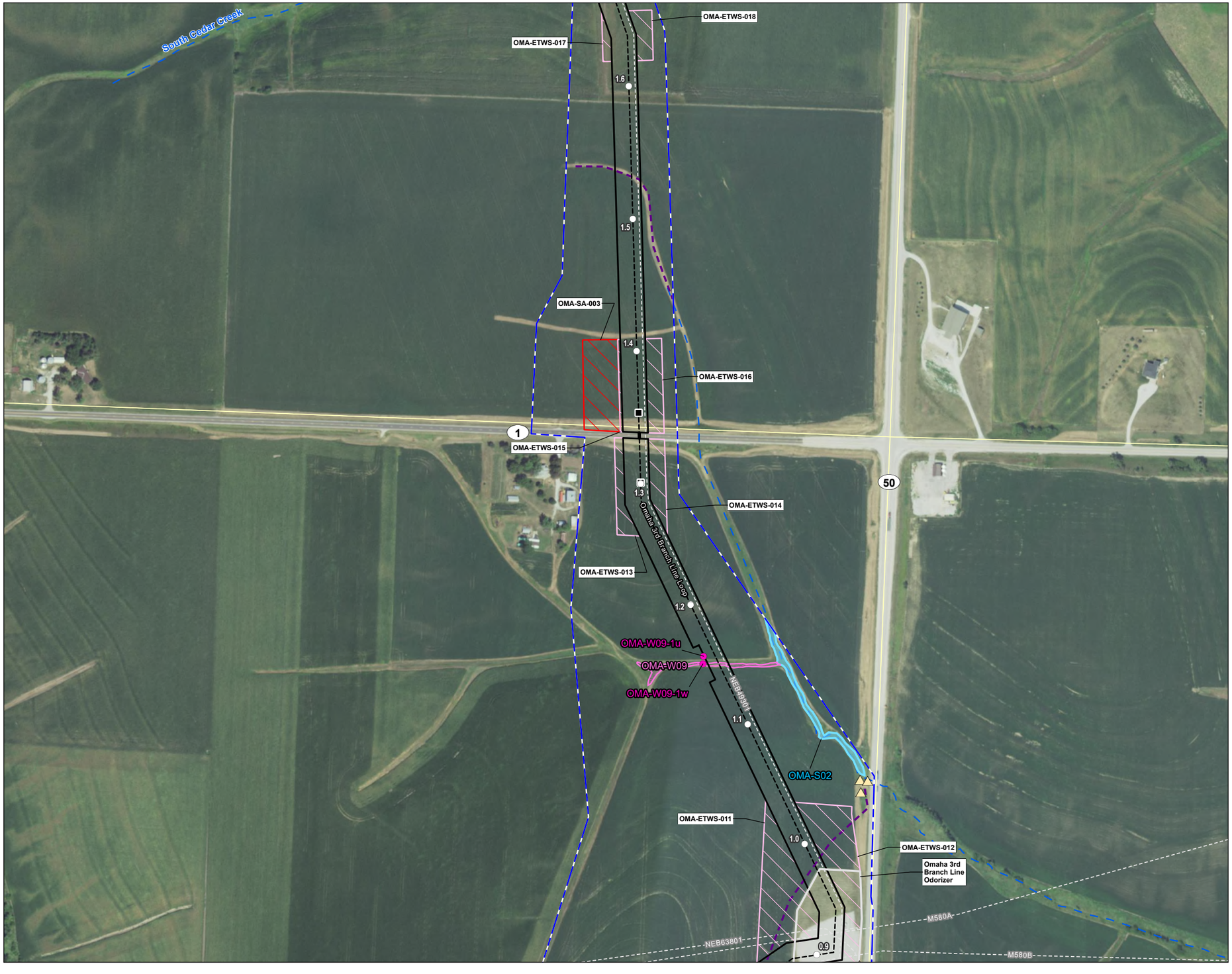

Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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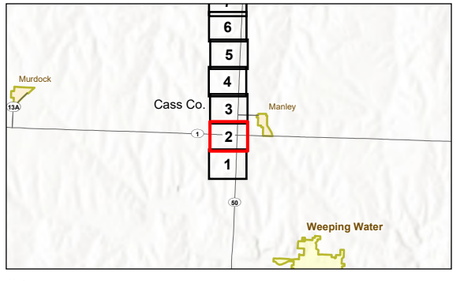
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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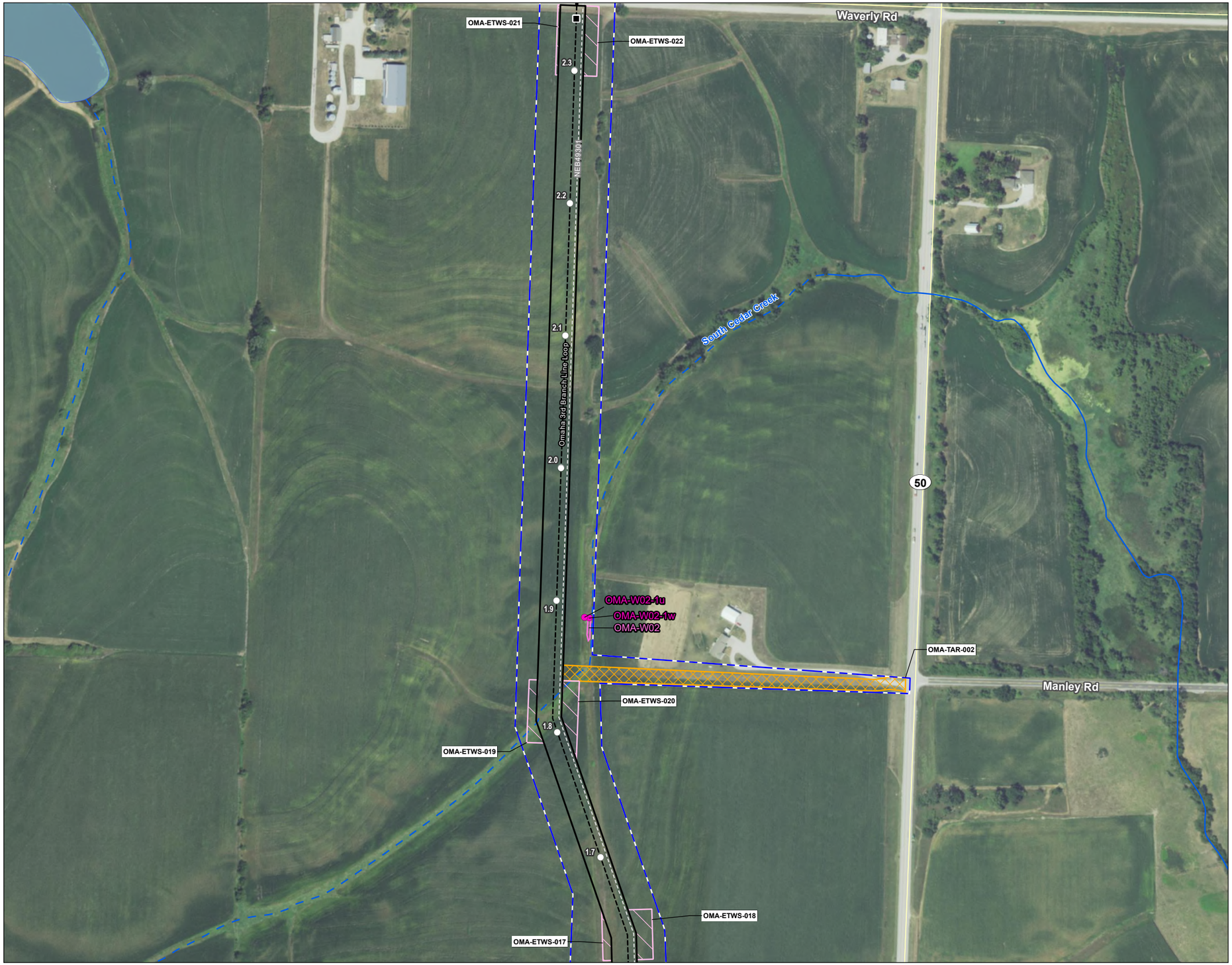


Figure No.
4

Title
Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

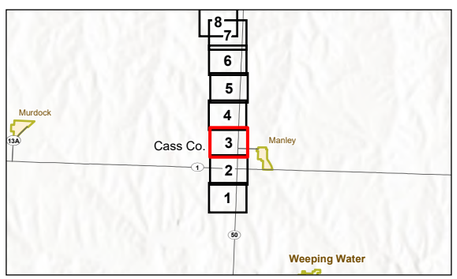
Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec
Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

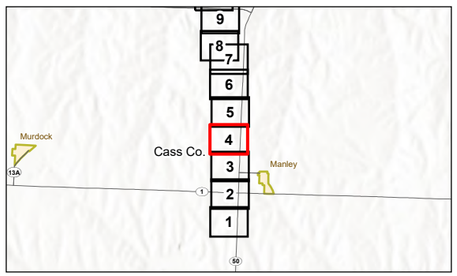
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

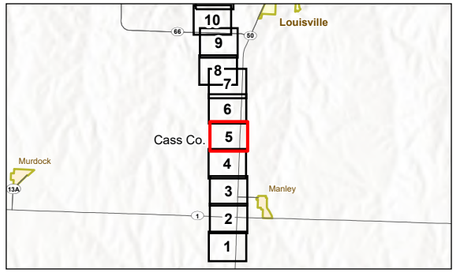
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Sample Point
- Upland Drainage Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Center
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

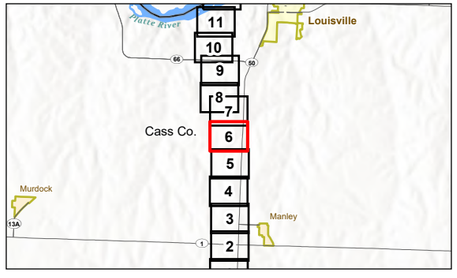
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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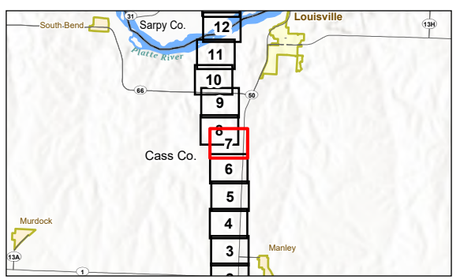
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Sample Point
- Storm Drain
- Upland Drainage Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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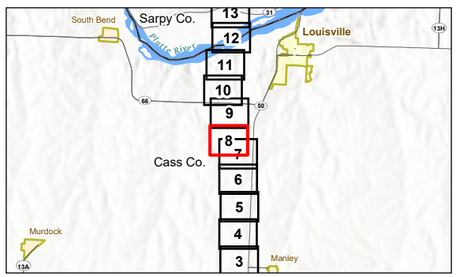
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Storm Drain
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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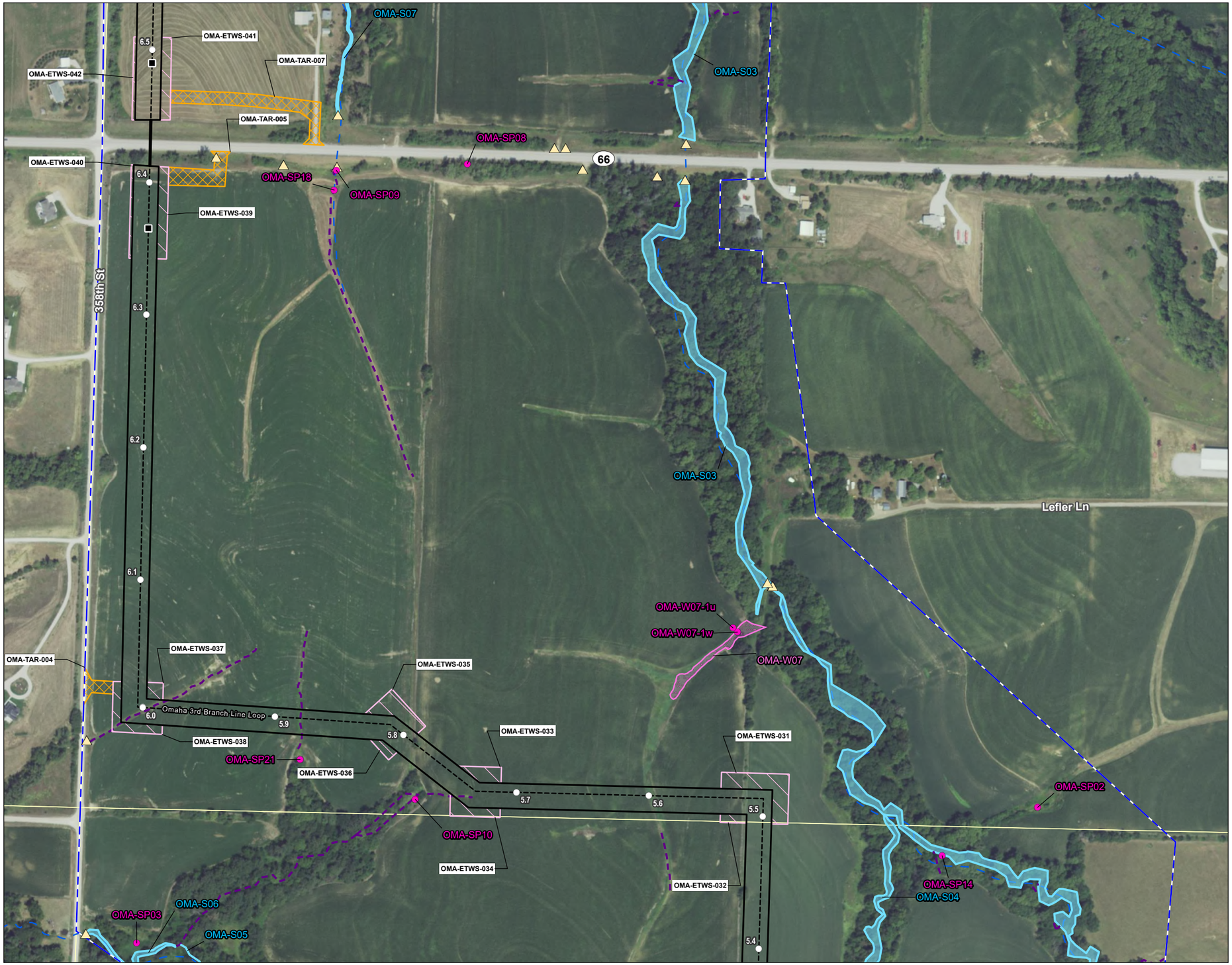


Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

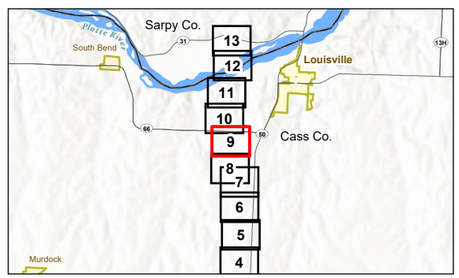
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
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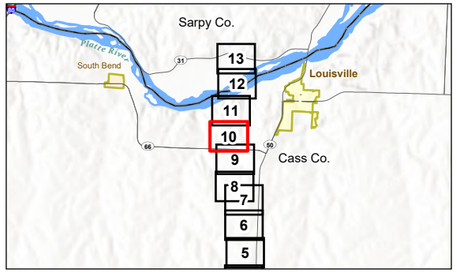
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Open Water

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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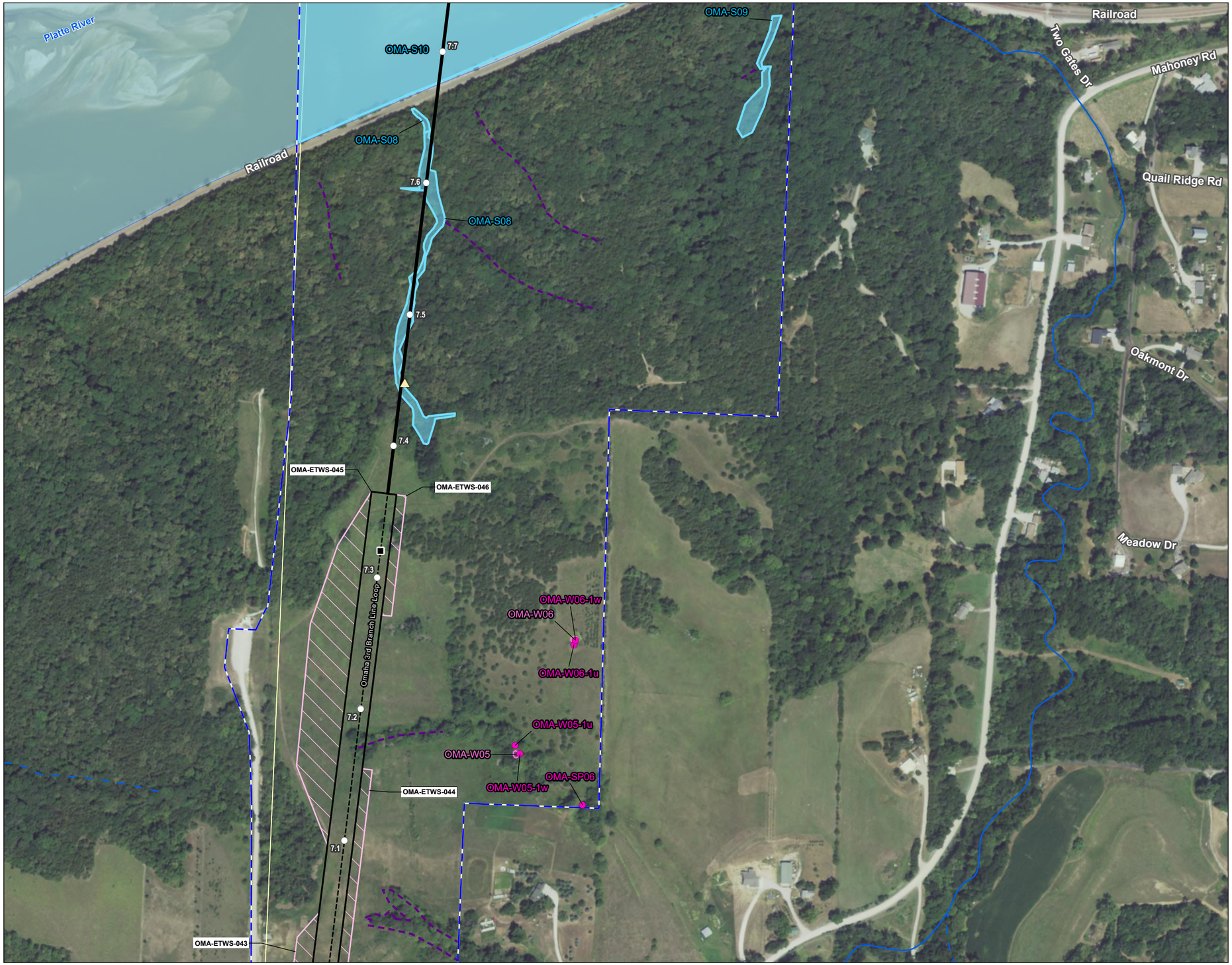

Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Louisville
Cass County, Nebraska

Prepared by JM on 2026-02-09
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IR by SK on 2026-03-20

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- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

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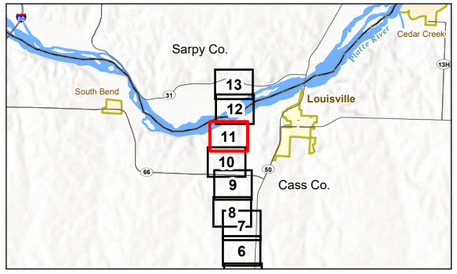
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

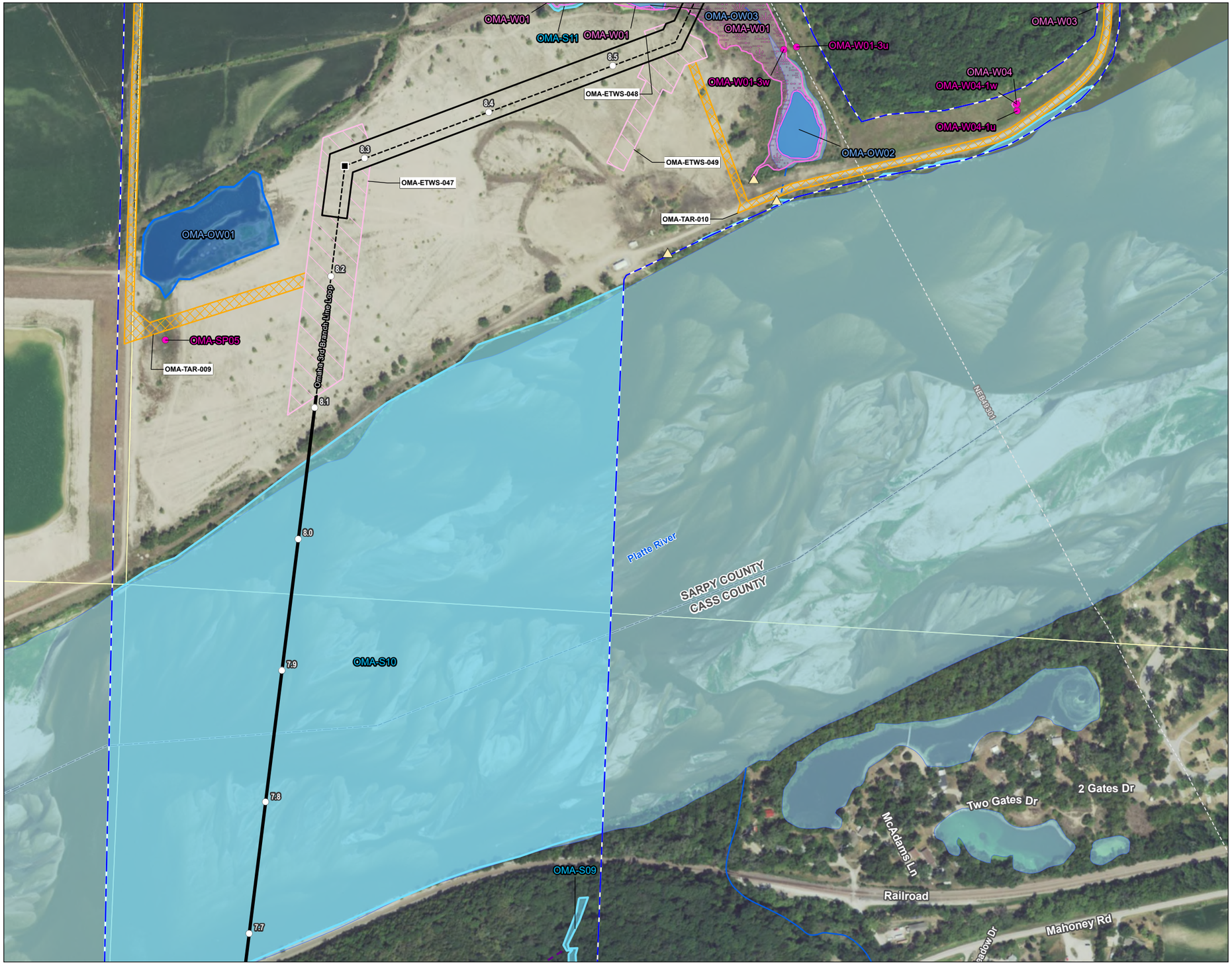


Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy & Cass Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

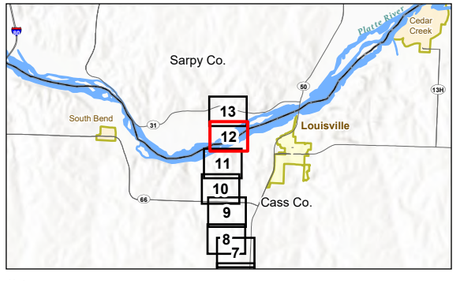
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Open Water
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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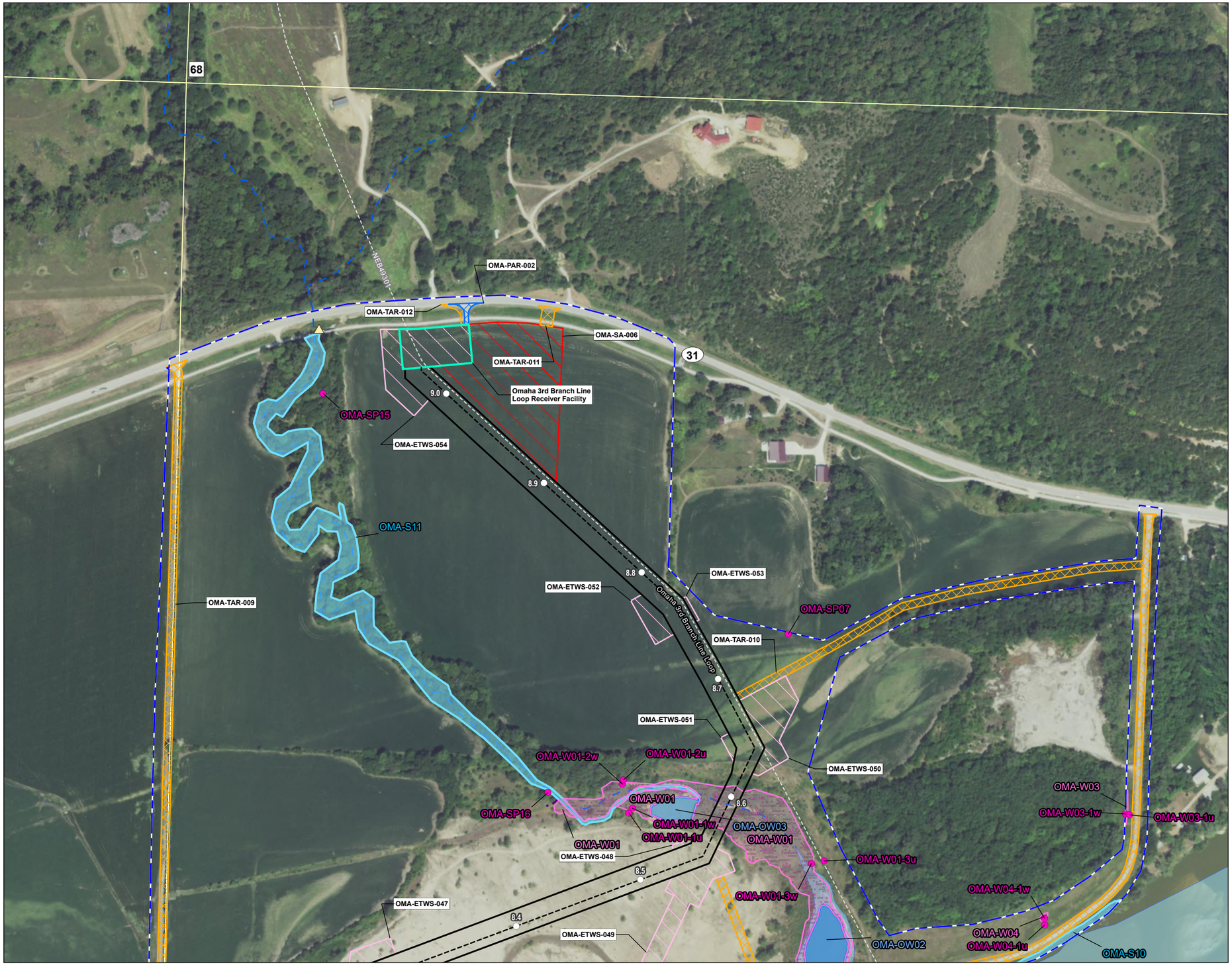


Figure No.

4

Title

Field Collected Data
Omaha 3rd Branch Line Loop

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Platford-Springfield II
Sarpy County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

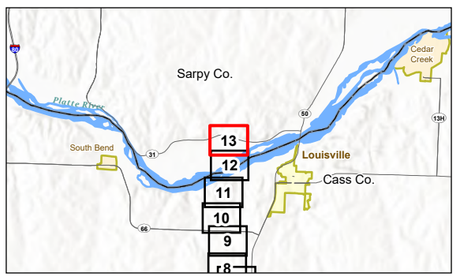
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Open Water
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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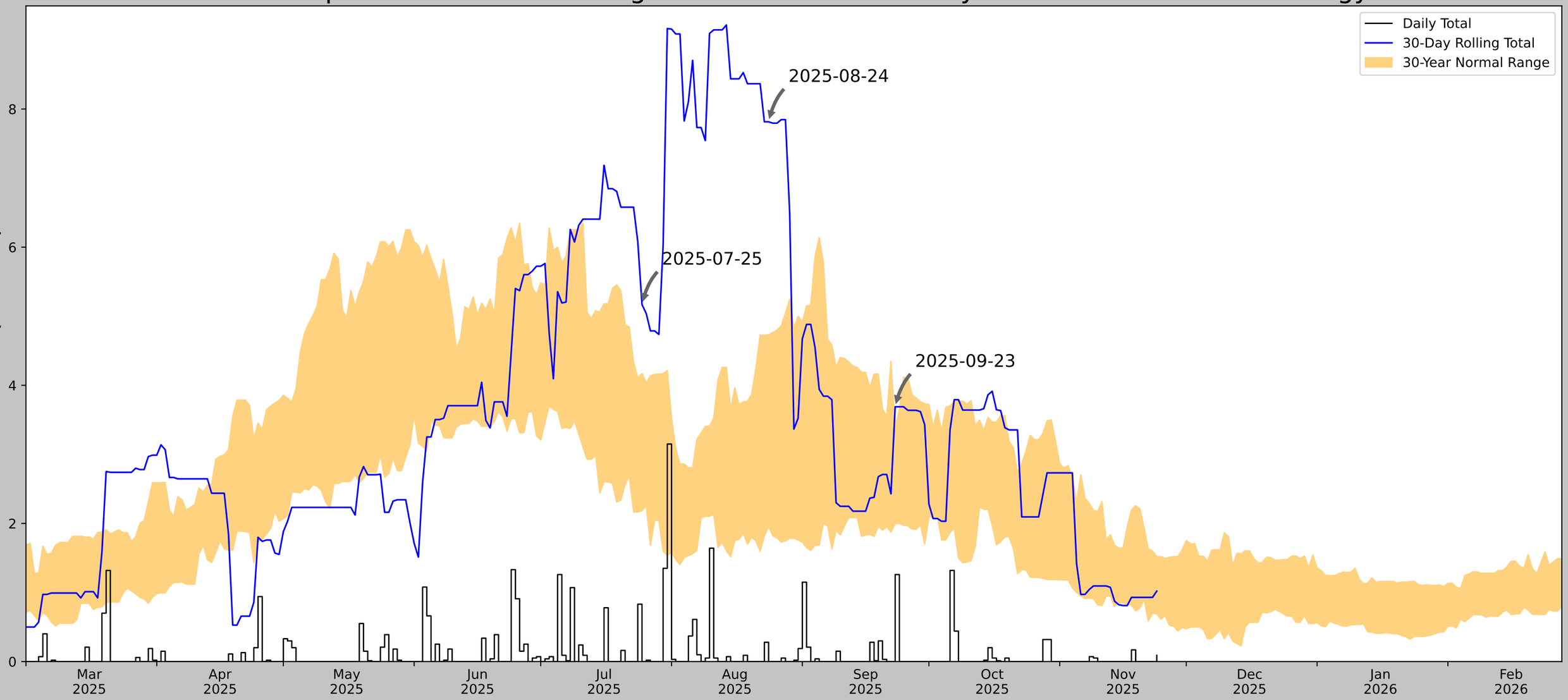
U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

Appendix B – Precipitation Analysis

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.93305, -96.18287
Observation Date	2025-09-23
Elevation (ft)	1299.177
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-23	1.994095	3.393307	3.688976	Wet	3	3	9
2025-08-24	1.95315	4.730315	7.814961	Wet	3	2	6
2025-07-25	2.184646	4.170866	5.169292	Wet	3	1	3
Result							Wetter than Normal - 18

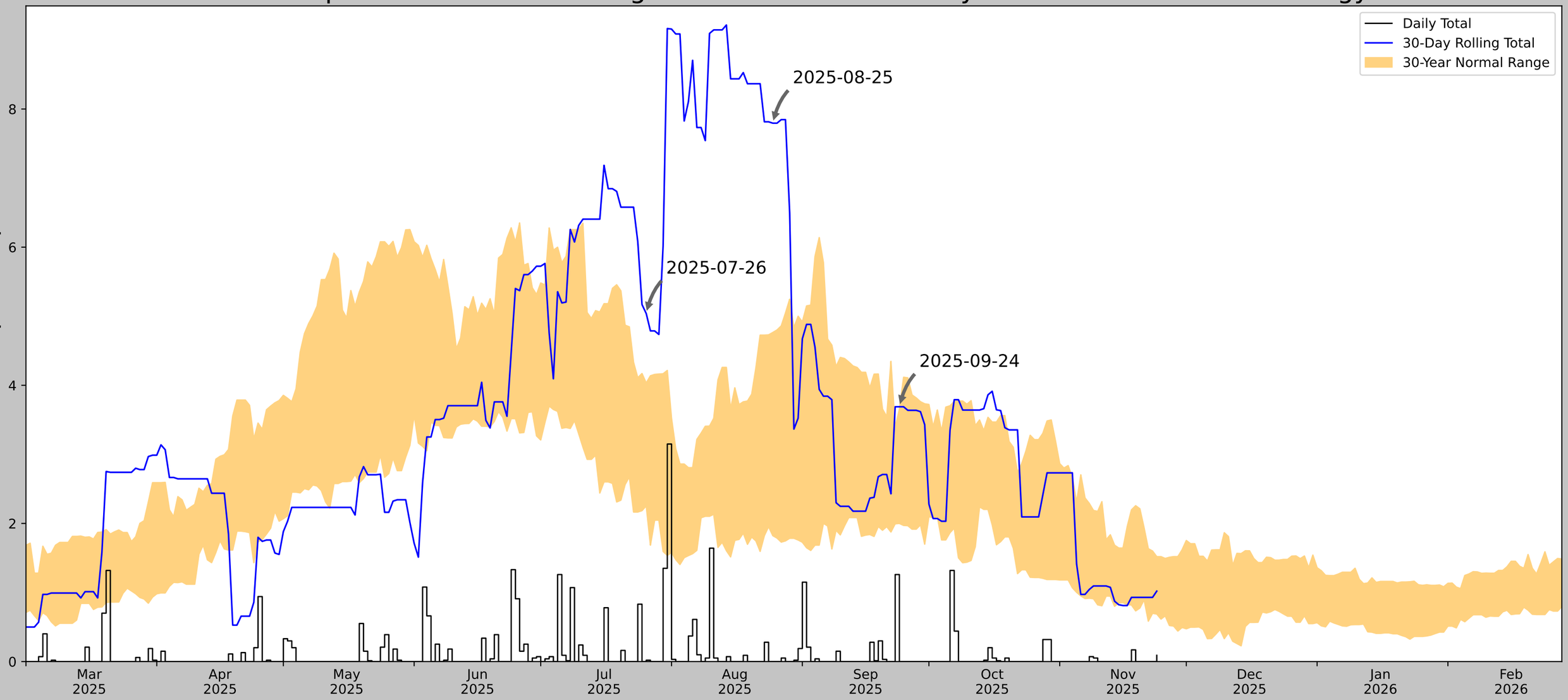
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	13.831	19.321	6.491	9722	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1373	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.93305, -96.18287
Observation Date	2025-09-24
Elevation (ft)	1299.177
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-24	1.999606	3.652756	3.688976	Wet	3	3	9
2025-08-25	1.822835	4.764961	7.795276	Wet	3	2	6
2025-07-26	2.254331	4.033465	5.03937	Wet	3	1	3
Result							Wetter than Normal - 18

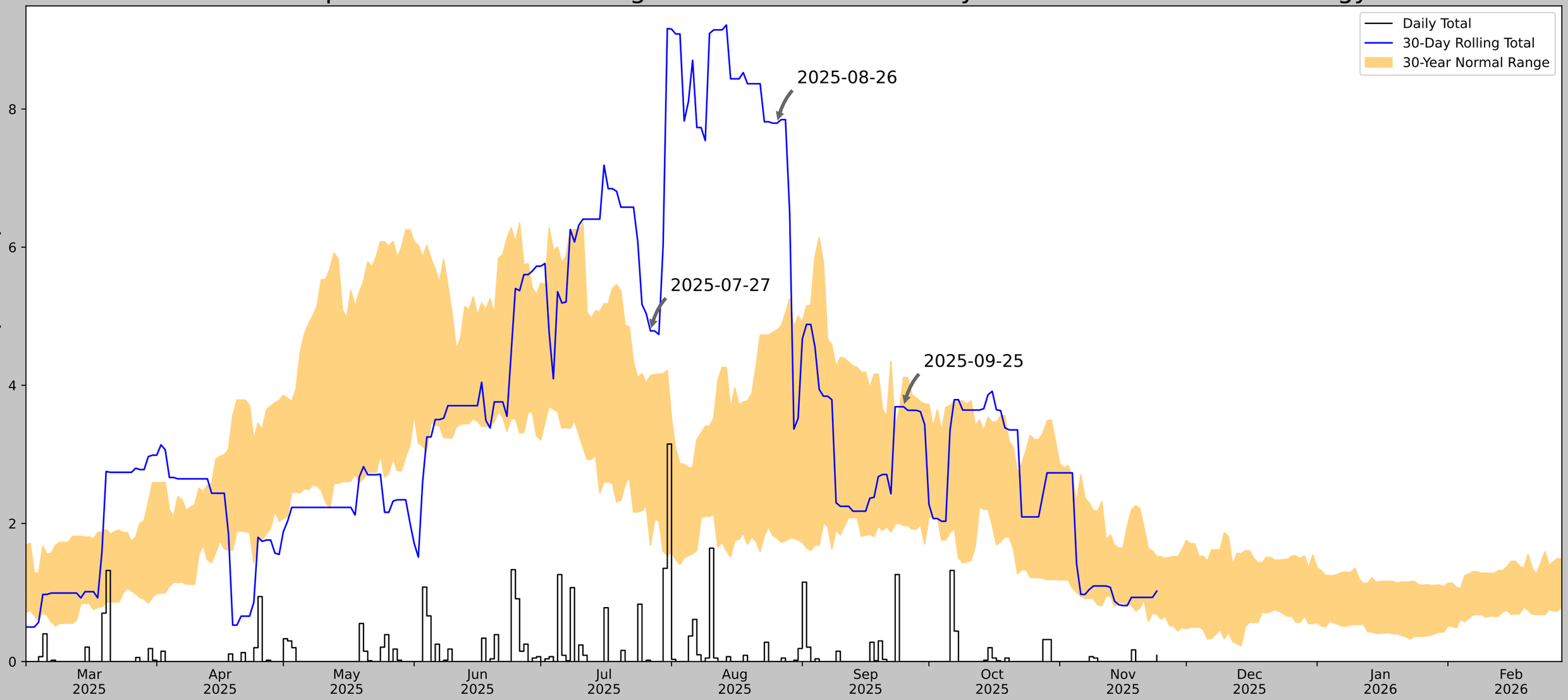
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	13.831	19.321	6.491	9722	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1373	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.93305, -96.18287
Observation Date	2025-09-25
Elevation (ft)	1299.177
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-25	1.970866	4.116536	3.688976	Normal	2	3	6
2025-08-26	1.787795	4.801181	7.795276	Wet	3	2	6
2025-07-27	1.685039	4.138189	4.787402	Wet	3	1	3
Result							Wetter than Normal - 15

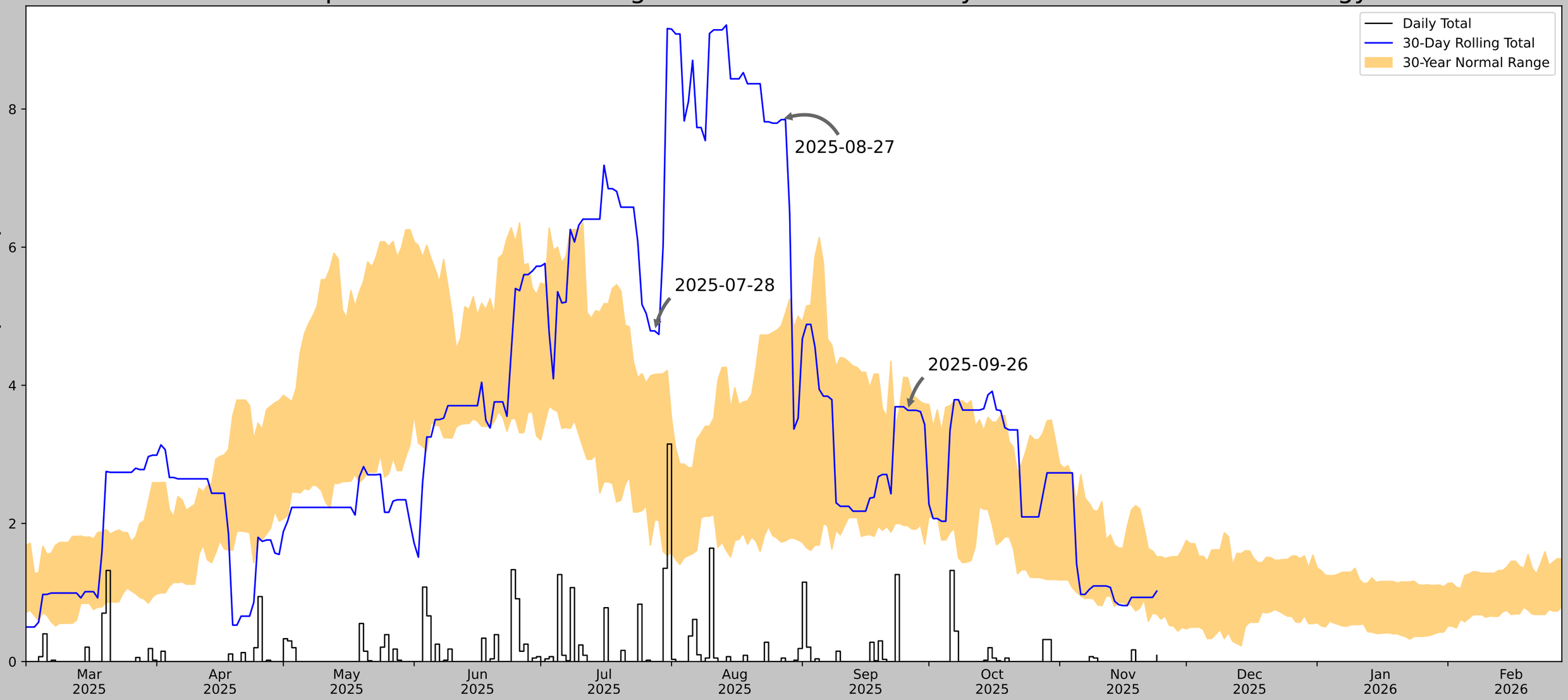
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	13.831	19.321	6.491	9722	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1373	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.93305, -96.18287
Observation Date	2025-09-26
Elevation (ft)	1299.177
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-26	1.967323	4.108268	3.637795	Normal	2	3	6
2025-08-27	1.729134	4.859843	7.846457	Wet	3	2	6
2025-07-28	2.047244	4.15748	4.787402	Wet	3	1	3
Result							Wetter than Normal - 15

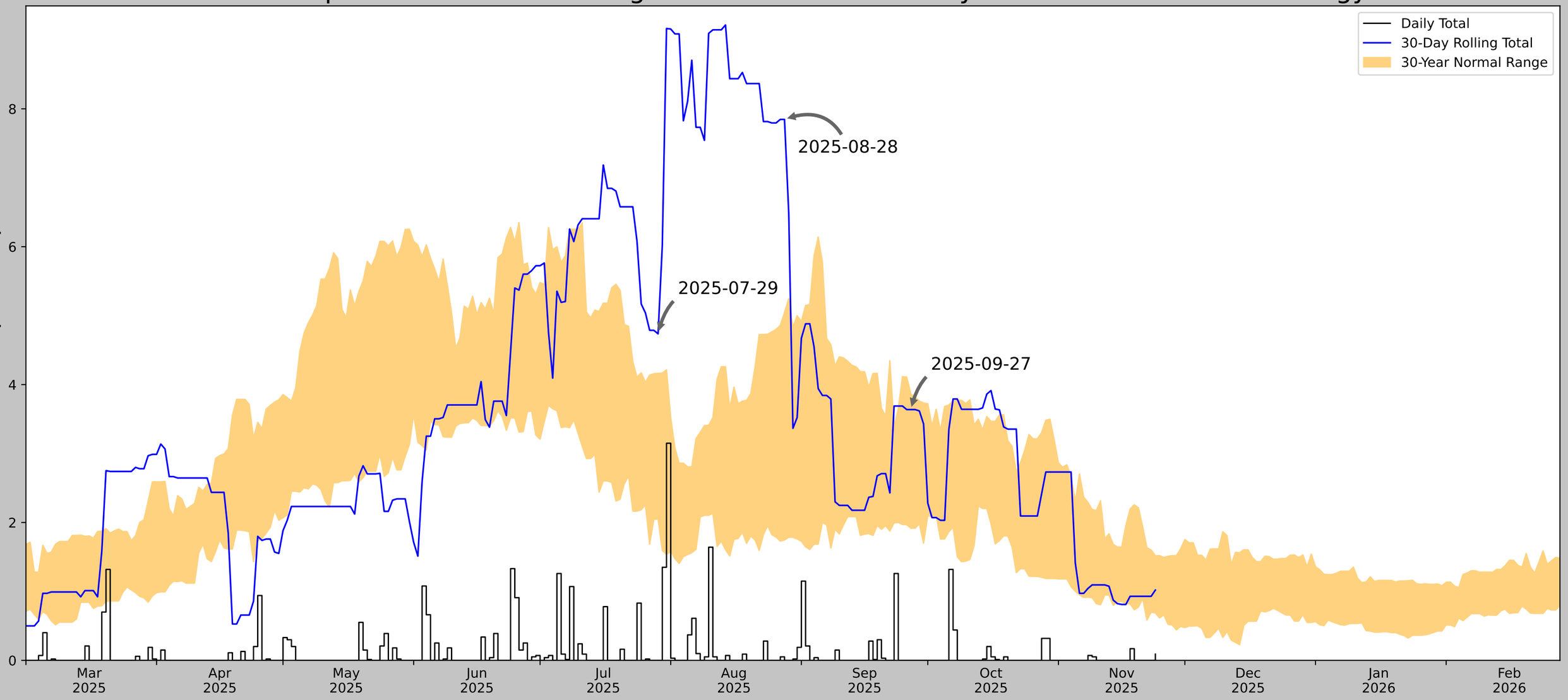
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	13.831	19.321	6.491	9722	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1373	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.93305, -96.18287
Observation Date	2025-09-27
Elevation (ft)	1299.177
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-27	1.916535	3.86063	3.637795	Normal	2	3	6
2025-08-28	1.74685	5.046063	7.846457	Wet	3	2	6
2025-07-29	2.047244	4.163386	4.736221	Wet	3	1	3
Result							Wetter than Normal - 15

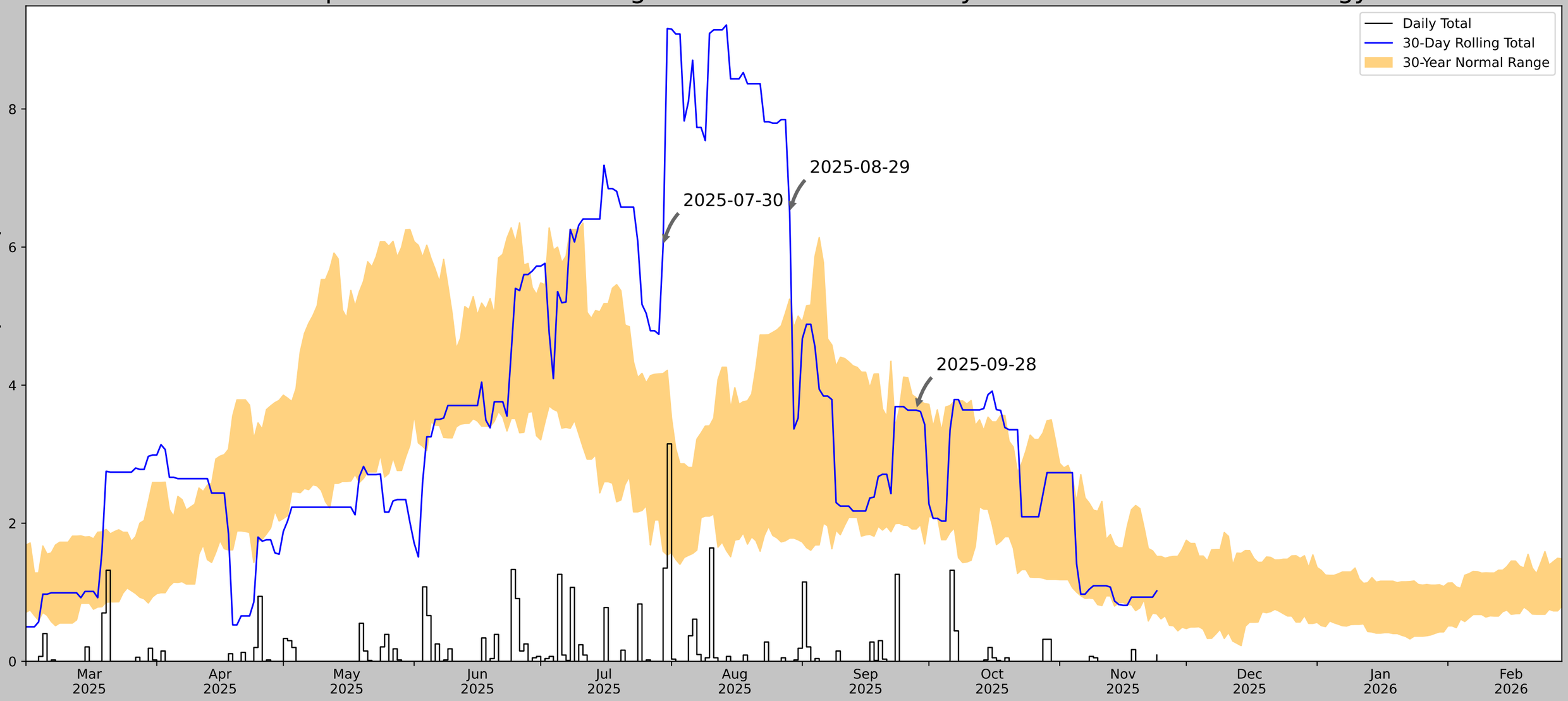
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	13.831	19.321	6.491	9722	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1373	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.01002, -96.19006
Observation Date	2025-09-28
Elevation (ft)	1032.566
Drought Index (PDSI)	Moderate wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-09-28	1.916535	3.817323	3.637795	Normal	2	3	6
2025-08-29	1.784646	5.246851	6.496063	Wet	3	2	6
2025-07-30	1.594488	4.166929	6.015748	Wet	3	1	3
Result							Wetter than Normal - 15

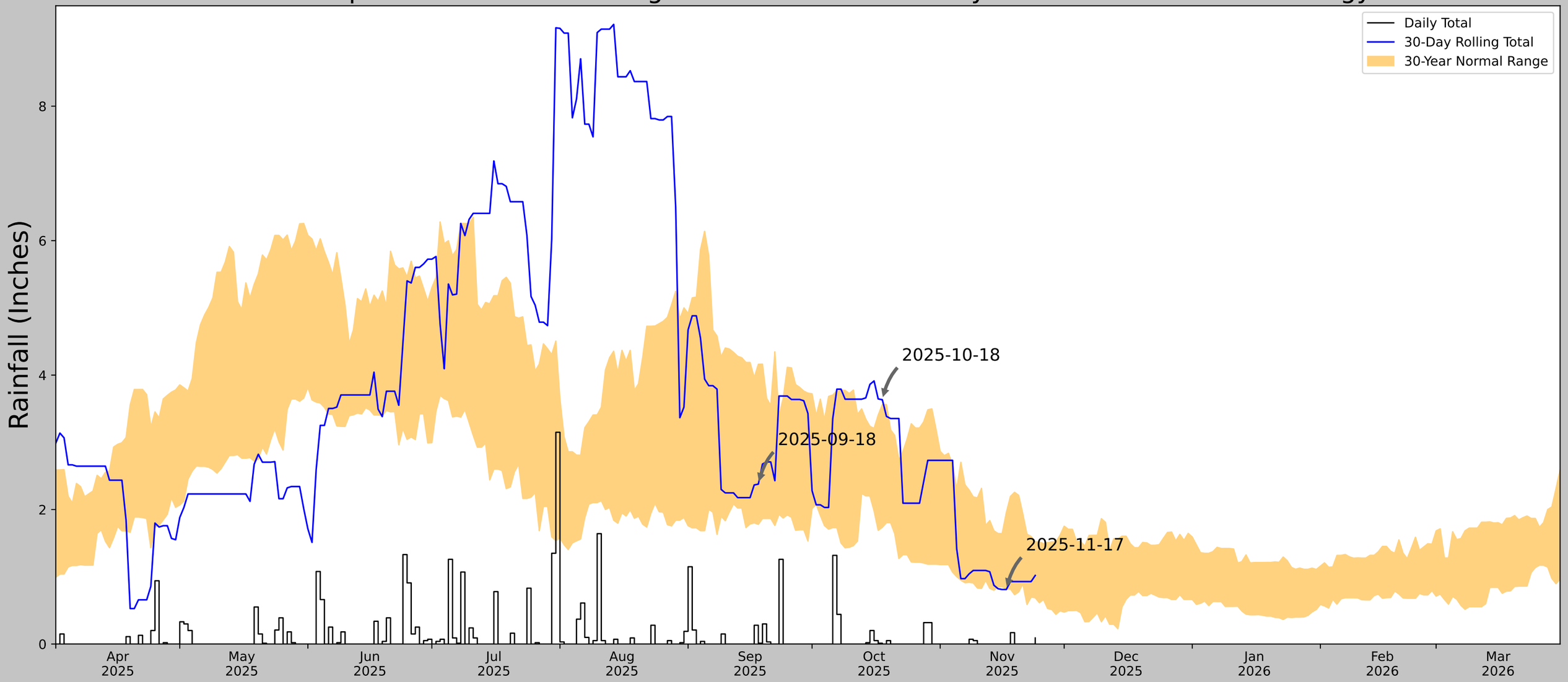
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	8.632	247.29	6.019	9722	90
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1373	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.01002, -96.19006
Observation Date	2025-11-17
Elevation (ft)	1032.566
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-17	0.818898	1.955512	0.811024	Dry	1	3	3
2025-10-18	1.736221	3.562205	3.633858	Wet	3	2	6
2025-09-18	1.779528	4.161417	2.377953	Normal	2	1	2
Result							Normal Conditions - 11

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

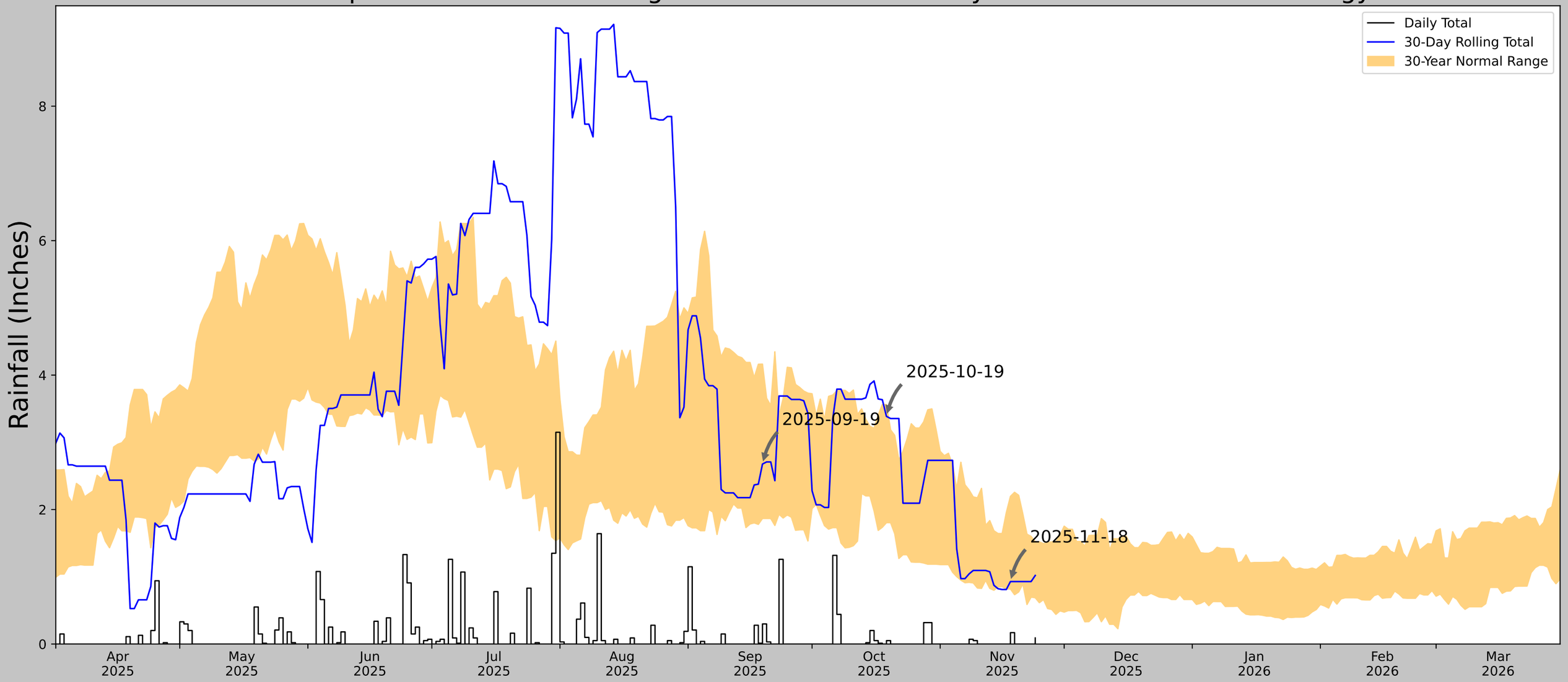
US Army Corps of Engineers.

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	8.632	247.29	6.019	10087	86
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 1.1 SW	41.1279, -96.2561	1277.887	0.45	1.969	0.203	0	4
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	0
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1008	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.93305, -96.18287
Observation Date	2025-11-18
Elevation (ft)	1299.177
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-18	0.818898	2.196457	0.929134	Normal	2	3	6
2025-10-19	1.805118	3.562205	3.385827	Normal	2	2	4
2025-09-19	1.867323	4.16378	2.677165	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	13.831	19.321	6.491	10087	85
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 1.1 SW	41.1279, -96.2561	1277.887	0.45	1.969	0.203	0	4
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	1
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1008	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Coordinates	41.01002, -96.19006
Observation Date	2025-11-19
Elevation (ft)	1032.566
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-19	0.733465	2.257087	0.929134	Normal	2	3	6
2025-10-20	1.805118	3.186221	3.354331	Wet	3	2	6
2025-09-20	1.867323	3.656693	2.708662	Normal	2	1	2
Result							Normal Conditions - 14

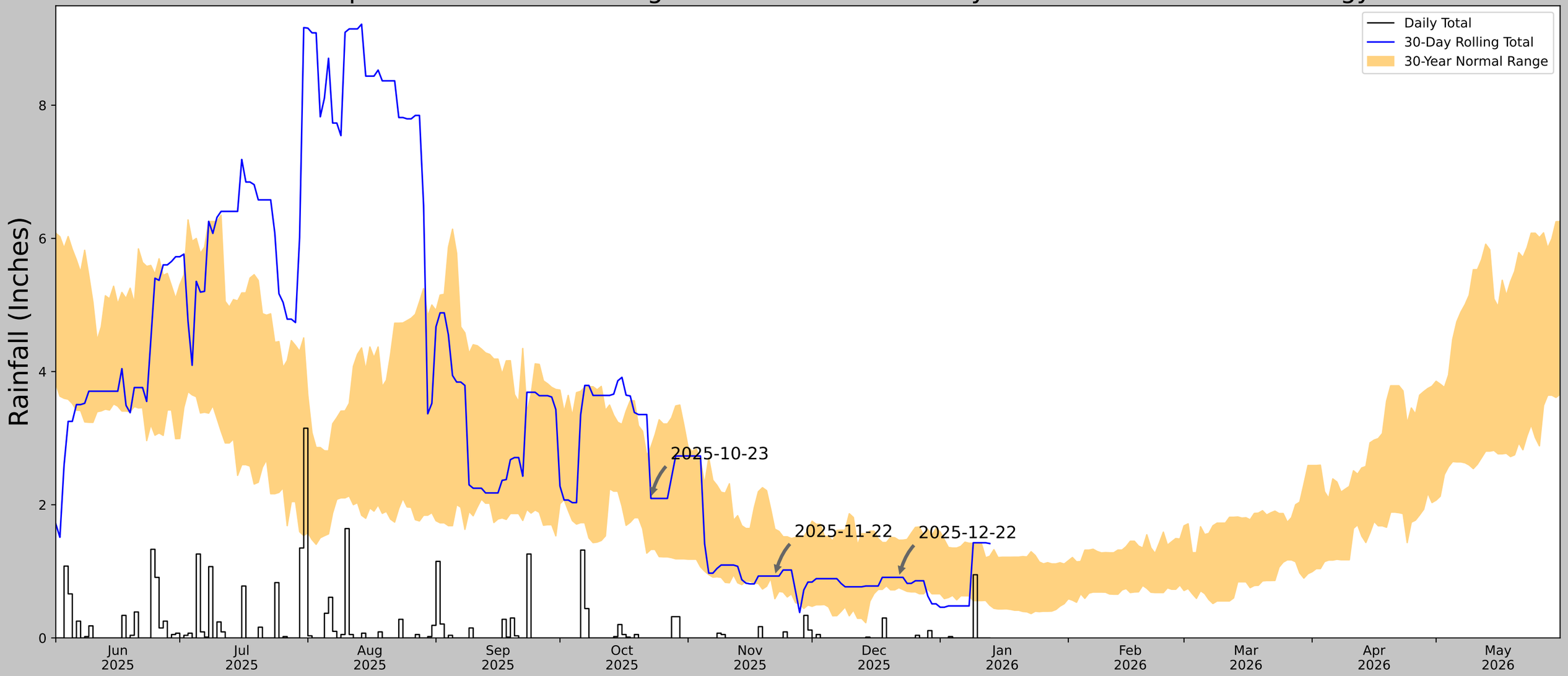
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	8.632	247.29	6.019	10087	84
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 1.1 SW	41.1279, -96.2561	1277.887	0.45	1.969	0.203	0	5
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	1
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1008	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.9729, -96.1941
Observation Date	2025-12-22
Elevation (ft)	1156.396
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-12-22	0.753937	1.46811	0.909449	Normal	2	3	6
2025-11-22	0.587795	1.633858	0.929134	Normal	2	2	4
2025-10-23	1.32874	2.866536	2.094488	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
GRETNA	41.1272, -96.2475	1279.856	11.018	123.46	6.319	10087	73
GRETNA 0.1 SSE	41.1271, -96.2474	1283.137	0.009	3.281	0.004	233	0
GRETNA 0.5 SSW	41.1274, -96.2483	1125.984	0.044	153.872	0.027	20	0
GRETNA 1.1 SW	41.1279, -96.2561	1277.887	0.45	1.969	0.203	0	9
GRETNA 2.9 NNE	41.1783, -96.2198	1216.864	3.813	62.992	1.956	1	6
GRETNA 3.0 NNE	41.1816, -96.224	1223.097	3.953	56.759	2.003	0	2
BOYS TOWN	41.2622, -96.1419	1240.158	10.823	39.698	5.3	1008	0
ASHLAND #2	41.0408, -96.3811	1118.11	9.168	161.746	5.608	4	0

Appendix C – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 09/24/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP01
Investigator(s): MB, MG | Section, Township, Range: S33, T012N, R011E
Landform (hillside, terrace, etc.): Side slope | Local relief (concave, convex, none): Concave
Slope (%): 0-10 | Lat: 40.964551 | Long: -96.186705 | Datum: WGS84
Soil Map Unit Name: | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in upland swale in NWI feature. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	60	Yes	FACU
2. *Persicaria amphibia*	20	Yes	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	80 (A)		260 (B)

Prevalence Index = B/A = 3.25

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	10YR 4/2	100					Silty Clay Loam	
7-24	10YR 4/2	95	2.5YR 5/4	5	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 09/25/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP02
Investigator(s): MB MG | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 2-3 | Lat: 40.972668 | Long: -96.18344 | Datum: WGS84
Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Vegetated swale leading into NWI/Waterway complex. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Salix nigra*	15	Yes	OBL
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Ambrosia trifida*	30	Yes	FAC
2. *Setaria faberi*	30	Yes	FACU
3. *Erigeron annuus*	15	No	FACU
4. *Andropogon gerardii*	10	No	FAC
5. *Verbena hastata*	10	No	FACW
6. *Geum canadense*	5	No	FAC
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	10	x 2 =	20
FAC species	45	x 3 =	135
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	115 (A)		350 (B)
Prevalence Index = B/A =			3.04

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 4/3	100					Silty Clay Loam	
2-9	10YR 2/1	100					Silty Clay Loam	
9-20	10YR 2/1	92	2.5YR 4/6	8	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___2 cm Muck (A10)
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Iron Monosulfide (A18)
___Sandy Mucky Mineral (S1)
___5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

____ Iron-Manganese Masses (F12)
____Red Parent Material (F21)
____Very Shallow Dark Surface (F22)
____Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
X Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? **Yes** _____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 09/26/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP03

Investigator(s): MB MG Section, Township, Range: S33, T012N, R011E

Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Linear

Slope (%): 6-8 Lat: 40.970826 Long: -96.196363 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
RCG and nettle open area near NWI and waterway. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Symphoricarpos orbiculatus*	30	Yes	FACU
2. *Gleditsia triacanthos*	15	Yes	FACU
3. *Juglans nigra*	15	Yes	FACU
4.			
5.			
	60	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	65	Yes	FACW
2. *Urtica dioica*	25	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	150 (A)		420 (B)

Prevalence Index = B/A = 2.8

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Silty Clay Loam	
16-20	10YR 5/3	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 09/26/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP04
Investigator(s): MB MG | Section, Township, Range: S33, T012N, R011E
Landform (hillside, terrace, etc.): Dip | Local relief (concave, convex, none): Concave
Slope (%): 0-4 | Lat: 40.969334 | Long: -96.192913 | Datum: WGS84
Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Edge of grassy swale with hummocks topo. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	40	Yes	FACU
2. *Setaria faberi*	20	Yes	FACU
3. *Phalaris arundinacea*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	0	x 5 =	0
Column Totals:	80 (A)		280 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/2	100					Silty Clay Loam	
12-20	10YR 5/3	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Sarpy County Sampling Date: 09/28/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP05

Investigator(s): MB MG Section, Township, Range: S16, T012N, R011E

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Linear

Slope (%): 3-6 Lat: 41.004378 Long: -96.196747 Datum: WGS84

Soil Map Unit Name: Pits, sand and gravel NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Gently sloping towards open water feature with Salix and Populus at bottom of "channel." Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Salix x fragilis*	25	Yes	FAC
2. *Populus deltoides*	25	Yes	FAC
3.			
4.			
5.			
	50	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Desmanthus illinoensis*	15	Yes	FACU
2. *Oenothera biennis*	15	Yes	FACU
3. *Rhus typhina*	15	Yes	UPL
4. *Heterotheca subaxillaris*	10	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	55	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	30	x 4 =	120
UPL species	25	x 5 =	125
Column Totals:	105 (A)		395 (B)
Prevalence Index = B/A =			3.76

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-30	7.5YR 6/3	100					Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP06

Investigator(s): RS, MG Section, Township, Range: S21, T012N, R011E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.989752 Long: -96.192808 Datum: WGS84

Soil Map Unit Name: Judson silt loam, 2 to 6 percent slopes NWI classification: PEM1Ah

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a NWI feature.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Symphoricarpos orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	60	Yes	FACU
2. *Poa pratensis*	40	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	65	x 4 =	260
UPL species	0	x 5 =	0
Column Totals:	105 (A)		380 (B)

Prevalence Index = B/A = 3.62

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-21	10YR 3/2	100					Silt	
21-26	10YR 4/3	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Sarpy County Sampling Date: 11/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP07

Investigator(s): RS MG Section, Township, Range: S16, T012N, R011E

Landform (hillside, terrace, etc.): Talf Local relief (concave, convex, none): Linear

Slope (%): 0-1 Lat: 41.010301 Long: -96.188432 Datum: WGS84

Soil Map Unit Name: Kennebec silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn field, no natural vegetation. Vegetation assumed non-hydric based on lack of crop stress, hydric soils, and wetland hydrology.

SOIL

Sampling Point: OMA-SP07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 3/2	100					Silt Loam	
11-18	10YR 3/3	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP08

Investigator(s): RS, MG Section, Township, Range: S28, T012N, R011E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.97947 Long: -96.192004 Datum: WGS84

Soil Map Unit Name: Marshall silty clay loam, 2 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in road ROW.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	45	Yes	FACU
2. *Quercus rubra*	15	Yes	FACU
3.			
4.			
5.			
	60	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	40	Yes	FACU
2. *Poa pratensis*	40	Yes	FAC
3. *Sorghastrum nutans*	20	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	160 (A)		600 (B)
Prevalence Index = B/A =			3.75

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

No soil pit taken due to potential buried underground utilities in road ROW. Soils assumed non-hydric based on NRCS mapped rating and lack of wetland hydrology and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP09
Investigator(s): RS, MG | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Dip | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 40.979348 | Long: -96.193891 | Datum: WGS84
Soil Map Unit Name: Colo-Nodaway complex, frequently flooded | NWI classification: R4SBC
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Point taken in road ROW.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix amygdaloides*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5 =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	55	Yes	FACU
2. *Daucus carota*	25	Yes	UPL
3. *Urtica dioica*	20	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	55	x 4 =	220
UPL species	25	x 5 =	125
Column Totals:	105 (A)		395 (B)
Prevalence Index = B/A =			3.76

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP09

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

No dig sample point due to the potential presence of unmarked, buried utilities. Soils assumed non-hydric based on NRCS mapped rating and lack of wetland hydrology and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP10

Investigator(s): RS, MG Section, Township, Range: S28, T012N, R011E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.972506 Long: -96.192422 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	25	Yes	FACW
2.			
3.			
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	125 (A)		450 (B)

Prevalence Index = B/A = 3.6

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Silt Loam	
10-18	10YR 5/4	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-SP11
Investigator(s): CP, JL Section, Township, Range: S04, T011N, R011E
Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Linear
Slope (%): 0-2 Lat: 40.94792 Long: -96.183846 Datum: WGS84
Soil Map Unit Name: Colo-Nodaway complex, frequently flooded NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Elymus repens*	50	Yes	FACU
2. *Bromus inermis*	25	Yes	FACU
3. *Trifolium pratense*	25	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	95	5YR 5/8	5	C	M	Silty Clay Loam	
16-24	10YR 3/2	90	7.5YR 5/8	10	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/19/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP14
Investigator(s): CP, JL | Section, Township, Range: S33, T012N, R011E
Landform (hillside, terrace, etc.): Hillside | Local relief (concave, convex, none): Convex
Slope (%): 15-20 | Lat: 40.972101 | Long: -96.184792 | Datum: WGS84
Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded | NWI classification: PFOA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Point taken on a steep slope that leads to waterway.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	50	Yes	FAC
2.			
3.			
4.			
5.			
	50	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Celtis occidentalis*	5	Yes	FAC
3. *Carya cordiformis*	5	Yes	FACU
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Ageratina altissima*	20	Yes	FACU
2. *Carex pensylvanica*	15	Yes	UPL
3. *Elymus villosus*	10	No	FACU
4. *Symphoricarpos orbiculatus*	10	No	FACU
5. *Hackelia virginiana*	10	No	FACU
6. *Ribes missouriense*	5	No	UPL
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	55	x 3 =	165
FACU species	55	x 4 =	220
UPL species	20	x 5 =	100
Column Totals:	140 (A)		505 (B)
Prevalence Index = B/A =			3.61

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 3/1	100					Loam	
14-24	10YR 3/2	100					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 09/28/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP15
Investigator(s): MB MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 2-4 | Lat: 41.01274 | Long: -96.195272 | Datum: WGS84
Soil Map Unit Name: Kennebec silt loam, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Old streambed topography with occasional willows and felled beaver chews. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Salix nigra*	20	Yes	OBL
2.			
3.			
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	65	Yes	FACU
2. *Glyceria striata*	10	No	OBL
3. *Toxicodendron radicans*	10	No	FAC
4. *Glechoma hederacea*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	115 (A)		360 (B)

Prevalence Index = B/A = 3.13

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 5/1	100					Silt Loam	
4-13	10YR 5/1	95	7.5YR 5/6	5	C	M	Silt Loam	
13-20	10YR 5/1	92	7.5YR 5/6	8	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 09/28/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP16
Investigator(s): MB, MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Backslope | Local relief (concave, convex, none): Linear
Slope (%): 0-10 | Lat: 41.008472 | Long: -96.191817 | Datum: WGS84
Soil Map Unit Name: | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken on side of waterway bank away from waterway. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	100	Yes	FACU
2.			
3.			
4.			
5.			
	100	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	40	Yes	FACW
2. *Equisetum hyemale*	40	Yes	FACW
3. *Bromus inermis*	15	No	FACU
4. *Ampelopsis cordata*	10	No	FAC
5. *Toxicodendron radicans*	7	No	FAC
6. *Verbesina alternifolia*	3	No	FACW
7.			
8.			
9.			
10.			
	115	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	83	x 2 =	166
FAC species	17	x 3 =	51
FACU species	115	x 4 =	460
UPL species	0	x 5 =	0
Column Totals:	215 (A)		677 (B)
Prevalence Index = B/A =			3.15

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP16

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 4/2	100					Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 12/22/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP17
Investigator(s): RS | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Backslope | Local relief (concave, convex, none): Convex
Slope (%): 4 | Lat: 40.98192 | Long: -96.195972 | Datum: WGS84
Soil Map Unit Name: Monona silt loam, 11 to 17 percent slopes, eroded | NWI classification: PUBFh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken adjacent to open water feature.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus pumila*	20	Yes	UPL
2.			
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	50	Yes	FACU
2. *Setaria glauca*	30	Yes	FAC
3. *Medicago lupulina*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	30	x 3 =	90
FACU species	60	x 4 =	240
UPL species	20	x 5 =	100
Column Totals:	110 (A)		430 (B)
Prevalence Index = B/A =			3.91

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP17

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on the prevalence of FACU vegetation, slope, and stark boundary contrast with open water feature.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 12/22/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP18
Investigator(s): RS | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Footslope | Local relief (concave, convex, none): Linear
Slope (%): 1 | Lat: 40.979132 | Long: -96.193911 | Datum: WGS84
Soil Map Unit Name: Colo-Nodaway complex, frequently flooded | NWI classification: R4SBC
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	90	Yes	FACU
2. *Setaria pumila*	10	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100 (A)		390 (B)

Prevalence Index = B/A = 3.9

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP18

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down. Soils conservatively presumed hydric based on a partially hydric NRCS mapped rating, though unlikely due to prevalence of FACU vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 12/22/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP19
Investigator(s): RS | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Backslope | Local relief (concave, convex, none): Convex
Slope (%): 4 | Lat: 40.984405 | Long: -96.193377 | Datum: WGS84
Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	60	Yes	FACU
2. *Poa pratensis*	10	No	FAC
3. *Setaria glauca*	10	No	FAC
4. *Ambrosia artemisiifolia*	10	No	FACU
5. *Bromus inermis*	5	No	FACU
6. *Conyza canadensis*	5	No	FACU
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP19

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen, unable to take pit. Soils assumed non-hydric based on the lack of hydrophytic vegetation and a NRCS mapped rating of predominantly non-hydric for the sampled area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 12/22/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP20
Investigator(s): RS | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Footslope | Local relief (concave, convex, none): Linear
Slope (%): 0 | Lat: 40.983109 | Long: -96.193557 | Datum: WGS84
Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded | NWI classification: PFOA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Festuca rubra*	30	Yes	FACU
2. *Poa pratensis*	30	Yes	FAC
3. *Conyza canadensis*	10	No	FACU
4. *Mentha arvensis*	10	No	FACW
5. *Bromus inermis*	10	No	FACU
6. *Ambrosia artemisiifolia*	5	No	FACU
7. *Persicaria pensylvanica*	5	No	FACW
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	30	x 3 =	90
FACU species	55	x 4 =	220
UPL species	0	x 5 =	0
Column Totals:	100 (A)		340 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP20

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___2 cm Muck (A10)
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Iron Monosulfide (A18)
___Sandy Mucky Mineral (S1)
___5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

____ Iron-Manganese Masses (F12)
___Red Parent Material (F21)
___Very Shallow Dark Surface (F22)
___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils
Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:
Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a NRCS mapped rating of predominantly non-hydric for the sampled area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 12/22/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP21
Investigator(s): RS | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Footslope | Local relief (concave, convex, none): Linear
Slope (%): 0 | Lat: 40.972897 | Long: -96.194102 | Datum: WGS84
Soil Map Unit Name: Marshall silty clay loam, 6 to 11 percent slopes, eroded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	95	Yes	FACU
2. *Setaria glauca*	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	100 (A)		395 (B)
Prevalence Index = B/A =			3.95

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Trees confined to bank of stream

SOIL

Sampling Point: OMA-SP21

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a NRCS mapped rating of non-hydric for the sampled area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 12/22/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-SP22
Investigator(s): RS | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 40.98195 | Long: -96.197262 | Datum: WGS84
Soil Map Unit Name: Marshall silty clay loam, 6 to 11 percent slopes, eroded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in roadside ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Juniperus virginiana*	5	Yes	FACU
3.			
4.			
5.			
	15	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cornus racemosa*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	5	x 3 =	15
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	120 (A)		455 (B)
Prevalence Index = B/A =			3.79

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-SP22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a NRCS mapped rating of non-hydric for the sampled area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 09/28/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W01-1u
Investigator(s): MB, MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Shoulder | Local relief (concave, convex, none): Convex
Slope (%): 0-10 | Lat: 41.00828 | Long: -96.190639 | Datum: WGS84
Soil Map Unit Name: | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in grassland near pond and stream. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus pumila*	100	Yes	UPL
2.			
3.			
4.			
5.			
	100 =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Gleditsia triacanthos*	100	Yes	FACU
2.			
3.			
4.			
5.			
	100 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	40	Yes	FACU
2. *Tridens flavus*	20	Yes	UPL
3. *Setaria faberi*	15	No	FACU
4. *Erigeron annuus*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 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	160	x 4 =	640
UPL species	120	x 5 =	600
Column Totals:	280 (A)		1,240 (B)
Prevalence Index = B/A =			4.43

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W01-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	100					Silt Loam	
6-18	2.5Y 4/2	100					Silt Loam	
18-24	2.5Y 6/2	100					Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Sarpy County Sampling Date: 09/28/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W01-1w

Investigator(s): MB, MG Section, Township, Range: S16, T012N, R011E

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 41.008335 Long: -96.190591 Datum: WGS84

Soil Map Unit Name: NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken adjacent to stream and pond. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W01-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/1	100					Silt Loam	
5-18	10YR 3/1	97	10YR 5/8	3	C	M	Silt Loam	Mixed with 2.5Y 6/2
18-24	2.5Y 5/2	95	10YR 5/8	5	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Sarpy County Sampling Date: 09/28/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W01-2u

Investigator(s): MB MG Section, Township, Range: S16, T012N, R011E

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex

Slope (%): 2-5 Lat: 41.008641 Long: -96.190733 Datum: WGS84

Soil Map Unit Name: Kennebec silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Upland shoulder 20ft higher than wetland due to the sharp topo change. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	35	Yes	FACU
2. *Ulmus pumila*	30	Yes	UPL
3.			
4.			
5.			
	65	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 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	135	x 4 =	540
UPL species	30	x 5 =	150
Column Totals:	165 (A)		690 (B)
Prevalence Index = B/A =			4.18

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W01-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-21	10YR 4/4	100					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 09/28/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W01-2w
Investigator(s): MB MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Toeslope | Local relief (concave, convex, none): Concave
Slope (%): 2-4 | Lat: 41.008593 | Long: -96.190745 | Datum: WGS84
Soil Map Unit Name: Pits, sand and gravel | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Lowland area with RCG next to stream. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Gleditsia triacanthos*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2. *Persicaria amphibia*	10	No	OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	110	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	120 (A)		250 (B)
Prevalence Index = B/A =			2.08

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W01-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	100					Silt Loam	
5-13	10YR 5/1	96	5YR 4/6	4	C	M	Silt Loam	
13-25	10YR 5/2	92	5YR 5/6	8	C	M	Silt Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Sarpy County Sampling Date: 11/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W01-3u

Investigator(s): CP Section, Township, Range: S16, T012N, R011E

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex

Slope (%): 0-1 Lat: 41.007834 Long: -96.187794 Datum: WGS84

Soil Map Unit Name: Pits, sand and gravel NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cornus racemosa*	20	Yes	FAC
2. *Ulmus pumila*	10	Yes	UPL
3. *Gleditsia triacanthos*	10	Yes	FACU
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	80	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	90	x 4 =	360
UPL species	10	x 5 =	50
Column Totals:	120 (A)		470 (B)
Prevalence Index = B/A =			3.92

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W01-3u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Loamy Sand	
8-24	10YR 4/2	100					Loamy Sand	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 11/17/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W01-3w
Investigator(s): RS | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 41.007803 | Long: -96.187976 | Datum: WGS84
Soil Map Unit Name: Alda-Platte complex, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W01-3w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	98	10YR 4/6	2	C	M	Silty Clay Loam	
18-26	10YR 5/2	85	10YR 5/2	15	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 09/23/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W02-1u
Investigator(s): MB MG | Section, Township, Range: S16, T011N, R011E
Landform (hillside, terrace, etc.): Footslope | Local relief (concave, convex, none): Convex
Slope (%): 3-5 | Lat: 40.922044 | Long: -96.182962 | Datum: WGS84
Soil Map Unit Name: | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	70	Yes	FACU
2. *Poa pratensis*	20	Yes	FAC
3. *Cyperus esculentus*	5	No	FACW
4. *Rumex crispus*	3	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	98	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	23	x 3 =	69
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	98 (A)		359 (B)
Prevalence Index = B/A =			3.66

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W02-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	98	5YR 4/4	2	C	M	Silty Clay Loam	
6-24	2.5Y 6/2	93	5YR 5/8	7	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 09/23/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W02-1w
Investigator(s): MB, MG | Section, Township, Range: S16, T011N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-10 | Lat: 40.922037 | Long: -96.182897 | Datum: WGS84
Soil Map Unit Name: | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in grassy swale. Climate conditions are wetter than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	50	Yes	FAC
2. *Echinochloa crusgalli*	10	No	FACW
3. *Rumex crispus*	5	No	FAC
4. *Cyperus esculentus*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	55	x 3 =	165
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		195 (B)

Prevalence Index = B/A = 2.79

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W02-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-13	10YR 5/2	92	10YR 6/8	8	C	M	Clay Loam	Mixed with 10YR 2/1 and 10YR 7/1, potential ag mixing. Refusal from c

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Refusal at 13 inches- compaction.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 11/17/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W03-1u
Investigator(s): RS, MG, JL, CP | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Side slope | Local relief (concave, convex, none): Convex
Slope (%): 3 | Lat: 41.00846 | Long: -96.183412 | Datum: WGS84
Soil Map Unit Name: Alda-Platte complex, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken alongside access road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus rubra*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	70	Yes	FACU
2. *Equisetum hyemale*	20	Yes	FACW
3. *Persicaria pensylvanica*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	0	x 3 =	0
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	100 (A)		350 (B)

Prevalence Index = B/A = 3.5

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W03-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Clay Loam	
10-18	10YR 3/3	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 11/17/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W03-1w
Investigator(s): JL CP RS MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Toeslope | Local relief (concave, convex, none): Concave
Slope (%): 0-2 | Lat: 41.008469 | Long: -96.183469 | Datum: WGS84
Soil Map Unit Name: Alda-Platte complex, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in depression at bottom of access road slope.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Symphoricarpos orbiculatus*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Other FACW*	35	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	105 (A)		230 (B)
Prevalence Index = B/A =			2.19

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Other FACW is Tall scouring rush.

SOIL

Sampling Point: OMA-W03-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Loam	
6-24	10YR 4/1	95	7.5YR 4/6	5	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 11/17/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W04-1u
Investigator(s): JL MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Backslope | Local relief (concave, convex, none): Linear
Slope (%): 10-20 | Lat: 41.007223 | Long: -96.184576 | Datum: WGS84
Soil Map Unit Name: Alda-Platte complex, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken on backslope adjacent to road.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	80	Yes	FACU
2. *Equisetum variegatum*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	90 (A)		340 (B)
Prevalence Index = B/A =			3.78

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W04-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/1	100					Clay Loam	
14-24	10YR 4/1	98	10YR 5/8	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Sarpy County | Sampling Date: 11/17/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W04-1w
Investigator(s): JL CP MG | Section, Township, Range: S16, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 41.007298 | Long: -96.184585 | Datum: WGS84
Soil Map Unit Name: Alda-Platte complex, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Symphoricarpos orbiculatus*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Spartina pectinata*	55	Yes	FACW
2. *Euthamia graminifolia*	20	Yes	FACW
3. *Setaria pumila*	10	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	10	x 3 =	30
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	90 (A)		200 (B)

Prevalence Index = B/A = 2.22

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W04-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					Loam	
8-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W05-1u
Investigator(s): RS, MG | Section, Township, Range: S21, T012N, R011E
Landform (hillside, terrace, etc.): Toeslope | Local relief (concave, convex, none): Linear
Slope (%): 0 | Lat: 40.990377 | Long: -96.193812 | Datum: WGS84
Soil Map Unit Name: Monona silt loam, 11 to 17 percent slopes, eroded | NWI classification: PEM1Ah
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	15	Yes	FACU
2. *Ulmus pumila*	10	Yes	UPL
3.			
4.			
5.			
	25	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Symphoricarpos orbiculatus*	15	Yes	FACU
2. *Robinia pseudoacacia*	5	Yes	FACU
3.			
4.			
5.			
	20	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Psathyrostachys juncea*	35	Yes	FAC
2. *Poa pratensis*	35	Yes	FAC
3. *Bromus inermis*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	70	x 3 =	210
FACU species	45	x 4 =	180
UPL species	10	x 5 =	50
Column Totals:	125 (A)		440 (B)
Prevalence Index = B/A =			3.52

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W05-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Silt	
5-11	10YR 4/2	93	10YR 5/8	7	C	M	Silt	Refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Rock refusal at 11 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W05-1w
Investigator(s): RS MG | Section, Township, Range: S21, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-20 | Lat: 40.990283 | Long: -96.193739 | Datum: WGS84
Soil Map Unit Name: Monona silt loam, 11 to 17 percent slopes, eroded | NWI classification: PEM1Ah
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in forested grassy area adjacent to horse pasture.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	30	Yes	FAC
2. *Cyperus bipartitus*	15	Yes	OBL
3. *Poa palustris*	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	50	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	5	x 2 =	10
FAC species	30	x 3 =	90
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	50 (A)		115 (B)

Prevalence Index = B/A = 2.3

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W05-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	10YR 5/2	90	10YR 4/6	10	C	M	Silt	
9-18	10YR 6/1	70	10YR 4/6	30	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W06-1u
Investigator(s): RS MG | Section, Township, Range: S21, T012N, R011E
Landform (hillside, terrace, etc.): Rise | Local relief (concave, convex, none): Convex
Slope (%): 0-10 | Lat: 40.991497 | Long: -96.193018 | Datum: WGS84
Soil Map Unit Name: Monona silt loam, 11 to 17 percent slopes, eroded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Point taken on rise in horse pasture.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	30	Yes	FACU
2. *Ambrosia artemisiifolia*	20	Yes	FACU
3. *Poa pratensis*	15	Yes	FAC
4. *Solidago canadensis*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	55	x 4 =	220
UPL species	0	x 5 =	0
Column Totals:	70 (A)		265 (B)

Prevalence Index = B/A = 3.79

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W06-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-17	10YR 5/4	100					Fine Sandy Loam	Rocky refusal at 17"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:
Rock refusal at 17 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W06-1w
Investigator(s): RS, MG | Section, Township, Range: S21, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 40.991547 | Long: -96.192997 | Datum: WGS84
Soil Map Unit Name: Monona silt loam, 11 to 17 percent slopes, eroded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crus-galli*	25	Yes	FACW
2. *Persicaria pensylvanica*	15	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	40	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	40 (A)		80 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W06-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 4/1	80	10YR 4/6	20	C	M	Silty Clay	
8-16	10YR 4/1	70	10YR 4/6	30	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W07-1u

Investigator(s): RS, MG Section, Township, Range: S28, T012N, R011E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 40.974507 Long: -96.187927 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested ag field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No veg, harvested soybean field. Vegetation assumed non-hydric based on a lack of hydric soils and wetland hydrology.

SOIL

Sampling Point: OMA-W07-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-31	10YR 3/1	100					Clay Loam	
31-36	10YR 3/3	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/18/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W07-1w
Investigator(s): RS, MG | Section, Township, Range: S28, T012N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 40.974464 | Long: -96.187862 | Datum: WGS84
Soil Map Unit Name: Nodaway silt loam, channeled, frequently flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W07-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/1	95	10YR 4/6	5	C	M	Loam	
16-24	10YR 4/1	90	10YR 4/6	10	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/19/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W08-1u

Investigator(s): JL CP Section, Township, Range: S21, T011N, R011E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 3-4 Lat: 40.900206 Long: -96.179924 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway complex, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	5	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	5	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	5	x 5 =	25
Column Totals:	5 (A)		25 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn.

SOIL

Sampling Point: OMA-W08-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 3/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/19/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W08-1w

Investigator(s): JL CP Section, Township, Range: S21, T011N, R011E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.900272 Long: -96.179995 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway complex, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W08-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Clay Loam	
6-10	10YR 3/1	95	5YR 4/6	5	C	M	Clay Loam	
10-24	10YR 4/1	90	5YR 4/6	10	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop City/County: Cass County Sampling Date: 11/19/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: OMA-W09-1u

Investigator(s): CP JL Section, Township, Range: S21, T011N, R011E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 3-4 Lat: 40.911843 Long: -96.180755 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway complex, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in harvested cornfield

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No identifiable vegetation present due to point being taken in harvested cornfield. Vegetation assumed non-hydric based on a lack of hydric soils and wetland hydrology.

SOIL

Sampling Point: OMA-W09-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/2	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Omaha 3rd Branch Line Loop | City/County: Cass County | Sampling Date: 11/19/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: OMA-W09-1w
Investigator(s): JL CP | Section, Township, Range: S21, T011N, R011E
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 40.911758 | Long: -96.18076 | Datum: WGS84
Soil Map Unit Name: Colo-Nodaway complex, frequently flooded | NWI classification: PEM1C
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a swale that leads to the waterway to the east.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	90	Yes	FACW
2. *Elymus repens*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)

Prevalence Index = B/A = 2.2

Hydrophytic Vegetation Indicators:
X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OMA-W09-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	98	5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Appendix D – Site Photographs

Photo 1. View of a degraded wet meadow community, photo taken facing west.

Photo 2. View of a degraded wet meadow community, photo taken facing west.

Photo 3. View of a degraded wet meadow community, photo taken facing north.

Photo 4. View of a degraded wet meadow community, photo taken facing east.

Photo 5. View of waterway OMA-S01, photo taken facing southwest.

Photo 6. View of waterway OMA-S02, photo taken facing south.

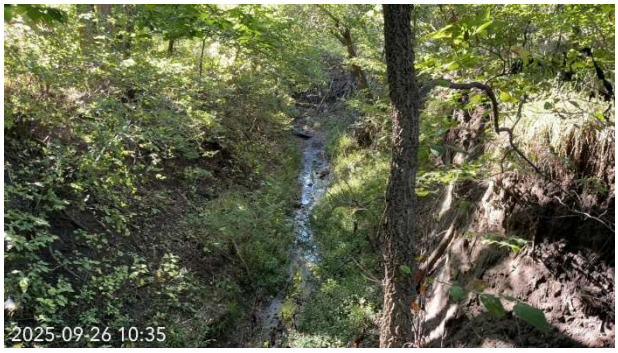


Photo 7. View of waterway OMA-S03, photo taken facing south.

Photo 8. View of waterway OMA-S04, photo taken facing southwest.

Photo 9. View of waterway OMA-S05, photo taken facing north.

Photo 10. View of waterway OMA-S06, photo taken facing west.

Photo 11. View of waterway OMA-S07, photo taken facing northwest.

Photo 12. View of waterway OMA-S08, photo taken facing north.

Photo 13. View of waterway OMA-S09, photo taken facing north.

Photo 14. View of waterway OMA-S10 (Platte River), photo taken facing south from north bank.

Photo 15. View of waterway OMA-S11, photo taken facing northeast.

Photo 16. View of waterbody OMA-OW01, photo taken facing west.

Photo 17. View of waterbody OMA-OW02, photo taken facing west.

Photo 18. View of waterbody OMA-OW03, photo taken facing west.

Photo 19. View of waterbody OMA-OW04, photo taken facing west.

Photo 20. General photo of maintained ROW, photo taken facing west.

Photo 21. General photo upland swale in harvested soy, photo taken facing northeast.

Photo 22. General photo of agricultural field, photo taken facing south.

Photo 23. General photo of harvested soy, photo taken facing west.

Photo 24. General photo of grassland/pasture, photo taken facing south.

Photo 25. General photo of grassland/pasture, photo taken facing west.

Photo 26. General photo of open sand plain, photo taken northwest.

Photo 27. General photo of degraded grassland, photo taken facing north.

Photo 28. General photo of cedar-dominated upland forest, photo taken facing north.

Photo 29. General photo of upland forest, photo taken facing northeast.

Photo 30. General photo of upland forest, photo taken facing northeast.

NPPD Princeton Road Power Station Branch Line

Beatrice to Palmyra D-line and Beatrice to Palmyra E-line Block Valve 5

Wetland Delineation Report

Central Mainline Corridor Expansion Project – NPPD Princeton Road Power Station Branch Line and Beatrice to Palmyra D-line and Beatrice to Palmyra E-line Block Valve 5
Gage and Lancaster Counties, Nebraska
Stantec Project #: 172609221

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Sign-off Sheet

This document entitled Wetland Delineation Report was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Northern Natural Gas (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by (signature)

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1.0 INTRODUCTION

Stantec understands that Northern Natural Gas (Northern) is regulated by the Federal Energy Regulatory Commission (FERC) and is responsible to comply with the Clean Water Act and with applicable state and local wetland regulations. Both the United States (U.S.) Army Corps of Engineers (USACE) and Nebraska Department of Water, Energy, and Environment (NDWEE) have regulatory authority over wetlands, navigable waters, and adjacent lands. Northern is required to review proposed actions and determine whether such actions may affect a waterbody or wetland under the jurisdiction of the NDWEE or the USACE. Northern secured the services of Stantec Consulting Services Inc. (Stantec) to conduct an evaluation for the proposed Central Mainline Corridor Expansion Project – NPPD Princeton Road Power Station branch line and Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5(Project).

The Environmental Survey Boundary (ESB) is approximately 1,144.26 acres in size and located in Gage and Lancaster Counties, Nebraska (Appendix A, Figure 1). The purpose and objective of the wetland determination and delineation were to identify the extent and spatial arrangement of wetlands and waterways within the ESB. The wetland delineations for the Project were completed by Stantec in October through December 2025.

A portion of the ESB includes the existing Northern Natural Gas Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 located north of Gage Road in Section 32, Township 7 North, Range 8 East, Lancaster County, Nebraska. This ESB portion was previously delineated in November 2022 as part of the M590E Beatrice to Palmyra ILI Mods Project. No previously identified resources were delineated in the current Project component footprint.

Wetland and waterways may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the NDWEE, and local regulation under jurisdiction of the local county, town, city, or village. Stantec recommends this report be submitted to local authorities, the NDWEE and USACE for final jurisdictional review and concurrence, as necessary.

2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), and Midwest Regional Supplement to the *Corps of Engineers Wetland Delineation Manual.*

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, National Hydrography Dataset (NHD) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. Antecedent precipitation was determined prior to the field investigation utilizing the USACE Antecedent Precipitation Tool (APT) (USACE 2025a). The tool compares precipitation totals from the three months prior to the date of the field efforts with 30-year normal amounts, calculating a weighted multi-month score and determining the climate conditions (dry, normal, wet).

A review of USDA Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP) aerial imagery and other available aerial imagery was conducted for the ESB to assist in the wetland delineation because farmed areas are present within the ESB with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wetland signatures within the farmed areas. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria.

The presence of mapped poorly and somewhat poorly drained soils, NWI mapping, and topography within the ESB was reviewed in conjunction with an analysis of available aerial imagery for wetland signatures in these areas. For each potential wetland area identified in the aerial imagery review, a sample point was collected during the field investigation. If the sample point met the wetland criteria, then the wetland area was mapped in the field.

The wetland boundary and sampling points were identified and surveyed with an iPad equipped with a Global Navigational Satellite System (GNSS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.

2.2 WATERWAYS

Observed waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features were mapped and described. Geomorphological characteristics of each waterway were collected at a waterway sample point, including the width and height of top of bank, the width and height of the ordinary high-water mark (OHWM), and channel substrate. The waterway lines, polygons, and sample point locations were surveyed with an iPad equipped with ESRI Field Maps and a GNSS capable of sub-meter accuracy and mapped using GIS software. However, the review of waterway potential for federal jurisdiction was beyond the scope of the investigation.

3.0 RESULTS

3.1 SITE DESCRIPTION

The ESB is comprised of agricultural cropland, pastureland, open land/grassland, prairies, maintained rights-of-way (ROW), mixed hardwood forests, residential lots, existing Northern facilities, wetlands, and waterways. Overall, the ESB contains flat agricultural land, with steep forested ridges and valleys near large water courses.

Soils present within the ESB, and their hydric status are summarized in Table 1. Wetlands identified during the field investigation are located primarily within areas mapped as predominantly non-hydric, moderately well drained soils (Appendix A, Figure 2).

Table 1. Summary of Soils Identified within the ESB

Soil Survey of Gage and Lancaster Counties, NE	Map Unit	Hydric Rating
Nodaway silt loam, channeled, occasionally flooded	7868	Predominantly Non-Hydric
Nodaway silt loam, channeled, frequently flooded	7867	Predominantly Non-Hydric
Colo-Nodaway silty clay loams, frequently flooded	7774	Partially Hydric
Nodaway silt loam, occasionally flooded	7750	Predominantly Non-Hydric
Wymore silty clay loam, 6 to 11 percent slopes	7697	Non-Hydric
Wymore silty clay loam, 2 to 6 percent slopes	7693	Non-Hydric
Wymore silty clay loam, 0 to 2 percent slopes	7689	Predominantly Non-Hydric
Wymore silty clay loam, 3 to 6 percent slopes, eroded	7684	Predominantly Non-Hydric
Wymore silty clay loam, 1 to 3 percent slopes	7681	Non-Hydric
Wymore silty clay loam, 0 to 1 percent slopes	7680	Non-Hydric
Mayberry silty clay loam, 6 to 11 percent slopes, eroded	7668	Non-Hydric
Mayberry silty clay loam, 3 to 6 percent slopes, eroded	7666	Non-Hydric

Soil Survey of Gage and Lancaster Counties, NE	Map Unit	Hydric Rating
Steinauer loam, 11 to 30 percent slopes	7617	Non-Hydric
Steinauer clay loam, 6 to 11 percent slopes, eroded	7614	Non-Hydric
Shelby clay loam, 7 to 12 percent slopes	7585	Predominantly Non-Hydric
Pawnee clay loam, 6 to 11 percent slopes, eroded	7507	Non-Hydric
Pawnee clay loam, 4 to 8 percent slopes, eroded	7501	Predominantly Non-Hydric
Otoe silty clay, 6 to 11 percent slopes, eroded	7466	Predominantly Non-Hydric
Otoe silty clay loam, 6 to 11 percent slopes, eroded	7464	Non-Hydric
Malmo, eroded-Pawnee complex, 6 to 11 percent slopes	7344	Non-Hydric
Judson silt loam, 2 to 6 percent slopes	7231	Predominantly Non-Hydric
Burchard clay loam, 6 to 11 percent slopes	7227	Non-Hydric
Burchard-Nodaway complex, 2 to 30 percent slopes	7211	Predominantly Non-Hydric
Kennebec silt loam, occasionally flooded	7050	Predominantly Non-Hydric
Crete silt loam, 0 to 1 percent slopes	3824	Predominantly Non-Hydric
Butler silt loam, 0 to 1 percent slopes	3820	Predominantly Non-Hydric

The NWI and NHD map identifies several wetland and riverine features within and adjacent to the ESB (Appendix A, Figure 3). The field delineated wetlands and waterways were generally located within or adjacent to the features identified on the NWI and NHD map.

Precipitation was analyzed using the USACE APT tool which calculates a three-month rolling precipitation total. Precipitation was considered normal prior to the field investigations on October 3-5, 2025, and November 10-13, 2025; and precipitation was considered direr than normal prior to the field investigations on November 18, 2025, and December 16-17, 2025, as shown in the precipitation figures in Appendix B.

3.2 WETLANDS

During the 2025 field investigations 18 wetlands were identified and delineated within the Project ESB. Field surveys were not conducted at the Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 because this area was previously delineated in 2022 as part of the M590E Beatrice to Palmyra ILI Mods Project, and no previously identified resources occur within the current Project component footprint. Wetland determination data forms were completed for sample points along transects through the wetlands and adjacent uplands and are contained in Appendix C. Photographs of the wetlands and adjacent lands are contained in Appendix D. The wetland boundary and sample point locations are shown on Appendix A, Figure 4. The wetlands are summarized in Table 2 below and described in detail in the following sections.

Table 2. Summary of Wetlands Identified within the ESB

Wetland ID	Wetland Classification		Federal Jurisdictional Determination[1]	Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39			
PRB-W09	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	No	1.62
PRB-W10	Degraded Wet Meadow, Shallow Marsh	PEM1B, PEM1C Type 2, Type 3	Potentially Jurisdictional	PRB-S18	2.69
PRB-W11	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.21
PRB-W12	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.10
PRB-W13	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	No	0.15
PRB-W14	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.09
PRB-W15	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	No	0.28
PRB-W16	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	PRB-S17	0.31
PRB-W17	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.03
PRB-W18	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.01
PRB-W28	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.08
PRB-W29	Shallow Marsh	PEM1C Type 3	Potentially Jurisdictional	No	0.57
PRB-W30	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.30
PRB-W31	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	PRB-S16	0.04
PRB-W32	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	PRB-S16	0.20
PRB-W33	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.02
PRB-W34	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.05
PRB-W35	Degraded Wet Meadow	PEM1B Type 2	Not Likely Jurisdictional	No	0.06

[1] Jurisdictional determination per USACE determination 33 CFR Part 328 on November 13, 1987

Palustrine Emergent Wetlands (Seasonally Flooded Basin/Farmed Wetland)

Three palustrine emergent (PEM) wetlands identified onsite were characterized as seasonally flooded basins/farmed wetlands which usually lack standing water throughout most of the growing season but are covered with water or waterlogged within a few inches of the surface during variable seasonal periods. Due to seasonally flooded wetlands remaining dry for much of the year these wetlands are often farmed. In the case of a farmed wetland, soil and vegetation are often considered disturbed due to plowing or tilling practices and the replacement of natural hydrophytic vegetation with cultivated crops. Seasonally flooded basins will fill shallow basins and support vegetation types such as grasses, sedges, and annual plants; or the vegetation is disturbed with cultivated crops and herbicide treatment.

Vegetation when present within the seasonally flooded basin/farmed wetland communities often included witchgrass (*Panicum capillare*), common reed (*Phragmites australis*), rough-fruited water hemp (*Amaranthus tuberculatus*), and stunted or stressed crops such as corn (*Zea mays*) or soybean (*Glycine max*). Secondary hydrology indicators observed at the wetland sample points included Surface Soil Cracks (B6), Saturation Visible on Aerial Imagery (C9), Stunted or Stressed Plants (D1), and a positive FAC-Neutral Test (D5). Hydric soil indicator Redox Dark Surface (F6) was observed at all wetland sample points within this community.

Palustrine Emergent Wetlands (Degraded Wet Meadow)

Thirteen palustrine emergent (PEM) wetlands identified onsite were characterized as wet meadows which usually lack standing water throughout most of the growing season but are saturated within a few inches of the surface. Vegetation typically includes grasses, sedges, rushes, and short broad-leaved plants. Wet meadow wetlands within the ESB were considered degraded due to a dominance of invasive species such as reed canary grass (*Phalaris arundinacea*), recurring farm practices within or adjacent to the wetland, and/or a location within roadside ROW.

Typical vegetative species documented within the degraded wet meadow wetland communities included reed canary grass, common reed, barnyard grass (*Echinochloa crus-galli*), giant ragweed (*Ambrosia trifida*), prairie cordgrass (*Spartina pectinata*), and occasionally a scattered shrub layer of black willow (*Salix nigra*). Wetland sample points were observed to meet the following wetland hydrology indicators Surface Soil Cracks (B6), Drainage Patterns (B10), True Aquatic Plants (B14), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), and a positive FAC-Neutral Test (D5). Hydric soil indicators observed at the wetland sample points included Depleted Below Dark Surface (A11), Depleted Matrix (F3), Redox Dark Surface (F6), and Other. The hydric soil indicator "Other" is an assumed hydric soil indicator based on the top 24 inches of the soil sample consisting of a dark matrix color in an area mapped as hydric by the NRCS.

Palustrine Emergent Wetlands (Shallow Marsh)

One palustrine emergent (PEM) wetland identified onsite was characterized as a shallow marsh which is usually inundated with standing water most of the growing season. Vegetation typically consists of emergent and fully aquatic plants.

Vegetation within the shallow marsh communities consisted of hybrid cattail (*Typha X glauca*), river bulrush (*Bolboschoenus fluviatilis*), reed canary grass, and common reed. Hydrology indicators observed at the wetland sample points included Surface Water (A1), High Water Table (A2), Saturation (A3), Geomorphic Position (D2), and a positive FAC-Neutral Test (D5). Hydric soil indicator Redox Dark Surface (F6) was observed at all wetland sample points within this community.

One PEM wetland identified onsite (delineated as PRB-W10) was defined as containing both degraded wet meadow and shallow marsh characteristics. No forested or scrub-shrub wetland communities were identified within the Project ESB during the 2025 field surveys.

3.3 UPLAND

Uplands consisted of agricultural cropland, pastureland, open land/grassland, prairies, maintained ROW, mixed hardwood forests, residential lots, and existing Northern facilities. Dominant plant species identified in the upland herb layer were smooth brome (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*), big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), quackgrass (*Elymus repens*), yellow foxtail (*Setaria pumila*), green foxtail (*Setaria viridis*), common sunflower (*Helianthus annuus*), side-oats grama (*Bouteloua curtipendula*), round-headed bush clover (*Lespedeza capitata*), dropseed species (*Sporobolus* spp.*),* velvet leaf (*Abutilon theophrasti*), red clover (*Trifolium pratense*), common milkweed (*Asclepias syriaca*), Canada goldenrod (*Solidago canadensis*), Indian grass (*Sorghastrum nutans*), cultivated species such as corn, soybean, and alfalfa (*Medicago sativa*). Dominant tree and shrub layer species consisted of Osage orange (*Maclura pomifera*), common hackberry (*Celtis occidentalis*), eastern cottonwood (*Populus deltoides*), white mulberry (*Morus alba*), Siberian elm (*Ulmus pumila*), honey locust (*Gleditsia triacanthos*), eastern red cedar (*Juniperus virginiana*), and green ash (*Fraxinus pennsylvanica*).

Soils in each upland area are mapped by the NRCS and depicted on Appendix A, Figure 2, and are also listed on the data sheets found in Appendix C. Typically, indicators of hydric soils were not observed within upland soil samples. Occasionally, soils met hydric soil indicators Depleted Below Dark Surface (A11) and Redox Dark Surface (F6), often just outside of wetland boundaries or in depressions within agricultural fields. When hydric soils were met in an upland, wetland hydrology or hydrophytic vegetation criteria were not met.

No primary indicators of hydrology were observed in the upland areas, and the uplands were found at similar or higher elevations than the wetland.

3.4 WATERWAYS

The 2025 field investigations identified ten waterways within the Project ESB. Characteristics of these waterways are summarized in Table 3 and are depicted on Appendix A, Figure 4. No waterways were identified as part of previous survey data within the Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 component.

Table 3. Summary of Waterways Identified within the ESB

Waterway ID	Flow Class	Height of Bank (feet)[1]	Top of Bank Width of Stream (feet)[1]	Water Depth (feet)[1]	Associated Surface Waters	Acreage within the ESB
PRB-S04	Intermittent	1	5	0	No	0.04
PRB-S12	Intermittent	6	18	0	No	0.93
PRB-S13	Intermittent	4	7	0	No	<0.01
PRB-S14	Intermittent	5	10	0	No	0.07
PRB-S15 (Spring Branch)	Intermittent	4	15	0	No	0.34
PRB-S16 (Middle Branch Big Nemaha River)	Perennial	12	15	1	PRB-W31, PRB-W32	0.46
PRB-S17	Intermittent	4	13	1	PRB-W16	0.38
PRB-S18	Intermittent	3	6	0.25	PRB-W10	0.25
PRB-S19 (Shaw Creek)	Perennial	4	10	0	PRB-S20	0.10
PRB-S20	Intermittent	2	4	0	PRB-S19	<0.01

[1]Waterway bank and depth measurements are approximate

3.5 WATERBODIES

The 2025 field investigations identified one waterbody within the Project ESB. Characteristics of the waterbody are summarized in Table 4 and are depicted on Appendix A, Figure 4. No waterbodies were identified as part of previous survey data within the Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5 component.

Table 4. Summary of Waterbodies Identified within the ESB

Waterbody ID	Type	Adjacent Surface Waters	Acreage within the ESB
PRB-OW09	Excavated Pond	No	0.02

3.6 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways within the ESB. However, there may be other regulated environmental features within the ESB, including, but not limited to, historical or archeological features, endangered or

threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or restrict land uses within or in close proximity to these features. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

4.0 CONCLUSION

Stantec performed a wetland delineation on behalf of Northern for the Central Mainline Corridor Expansion Project – NPPD Princeton Road Power Station branch line. The purpose and objective were to identify the extent and spatial arrangement of wetlands and waterways within the ESB.

During the 2025 field investigations, 18 wetlands, ten waterways, and one waterbody were identified and delineated within the ESB in accordance with state and federal guidelines and were subsequently surveyed with GNSS and mapped using GIS software. There was a combined total of 6.81 acres of wetlands, 2.57 acres of waterways, and 0.02 acre of open water waterbodies delineated within the ESB. Identified PEM wetlands were characterized as seasonally flooded basin/farmed wetland, degraded wet meadow, and shallow marsh wetland communities. Identified waterways were classified as intermittent and perennial streams, and the waterbody was classified as an excavated pond. Adjacent uplands were primarily composed of agricultural cropland, pastureland, open land/grassland, prairies, maintained ROW, mixed hardwood forests, residential lots, and existing Northern facilities.

Water resources that are considered waters of the U.S. (WOTUS) are subject to regulation under Section 404 of the Clean Water Act and the jurisdictional regulatory authority lies with the USACE as well as the NDWEE.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that Northern obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed project to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present within the ESB at the time of the fieldwork. Experienced and qualified professionals performed the delineation using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE and, in some cases, the NDWEE or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the ESB can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the ESB.

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Appendix A – Figures

Figure 1. Project Location

Figure 2. NRCS Soil Survey Data w/Hydric Rating

Figure 3. National Wetlands Inventory and National Hydrography Dataset

Figure 4. Field Collected Data

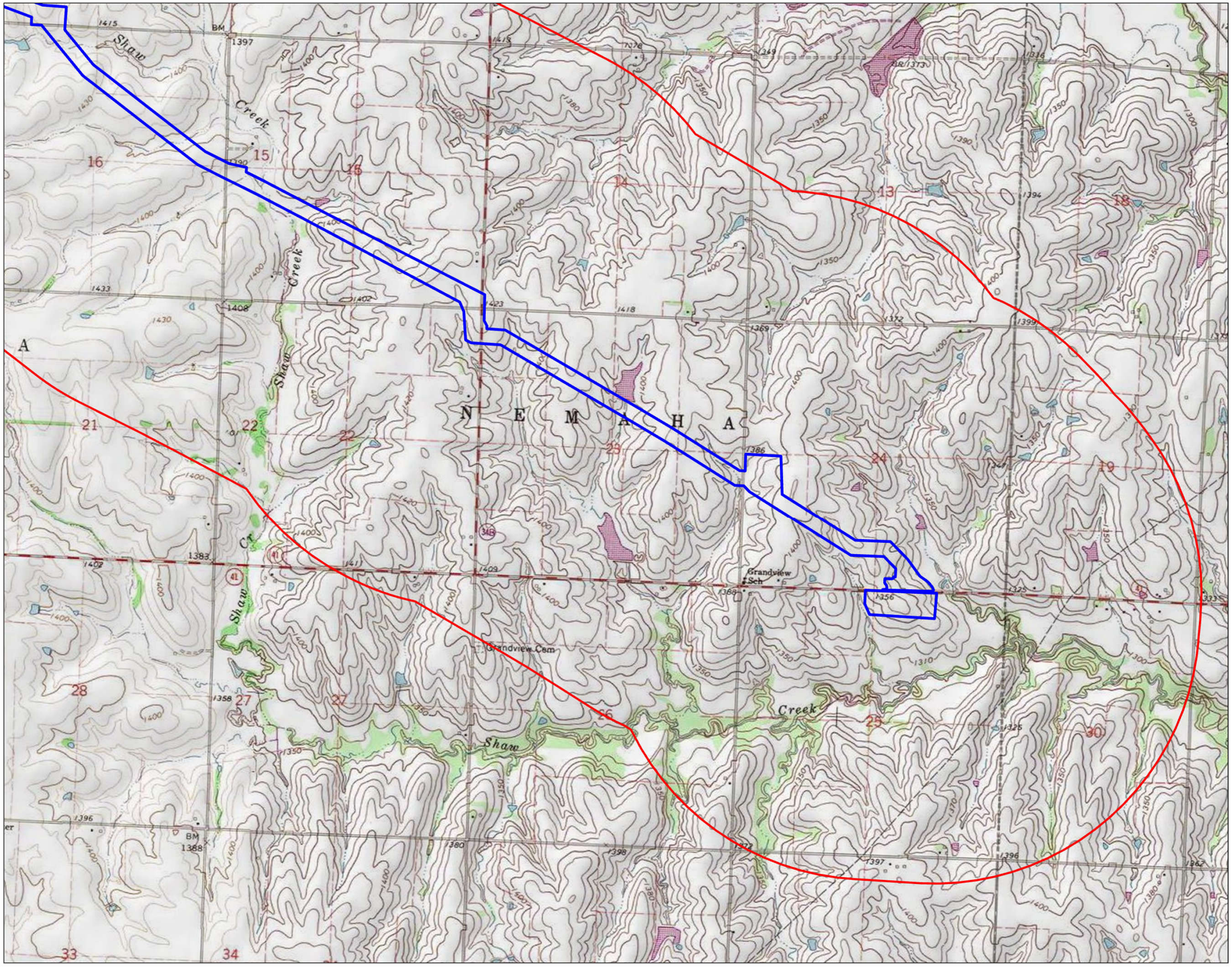

Figure No.

1

Title

Project Location & 1-Mile Buffer
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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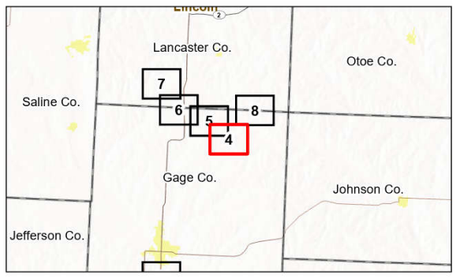

Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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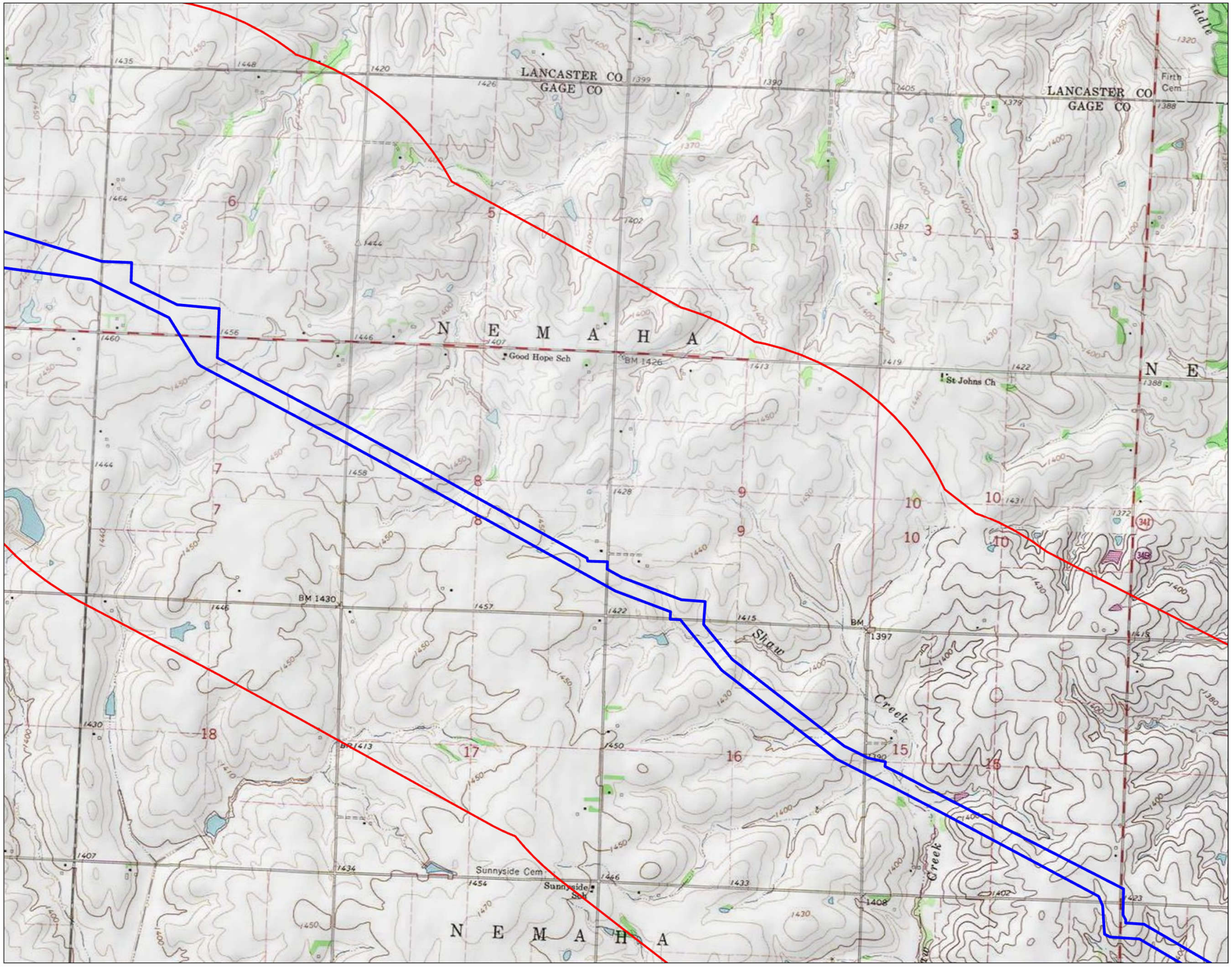

Figure No.

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Title

Project Location & 1-Mile Buffer
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
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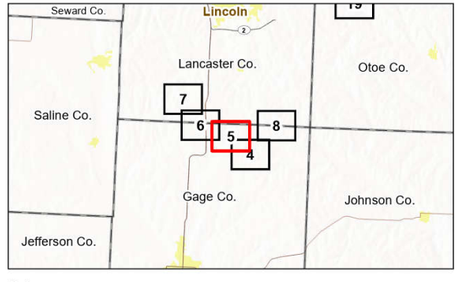

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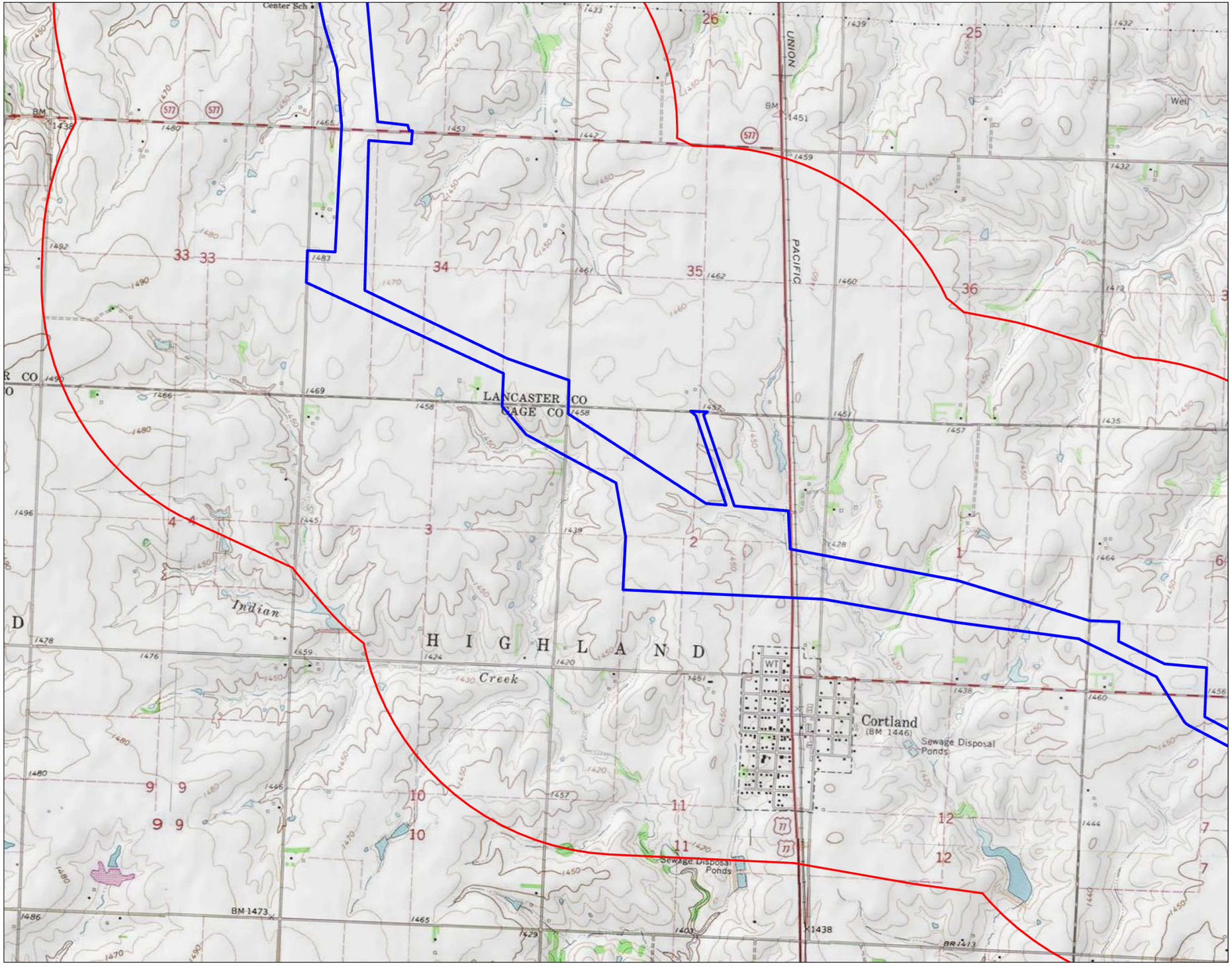

Figure No.

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Title

Project Location & 1-Mile Buffer
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland & Precinct of Buda
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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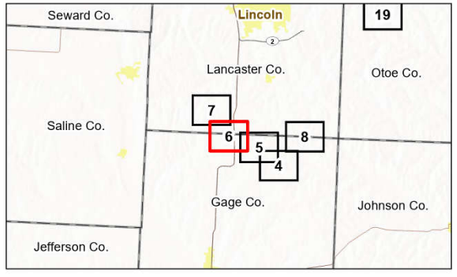

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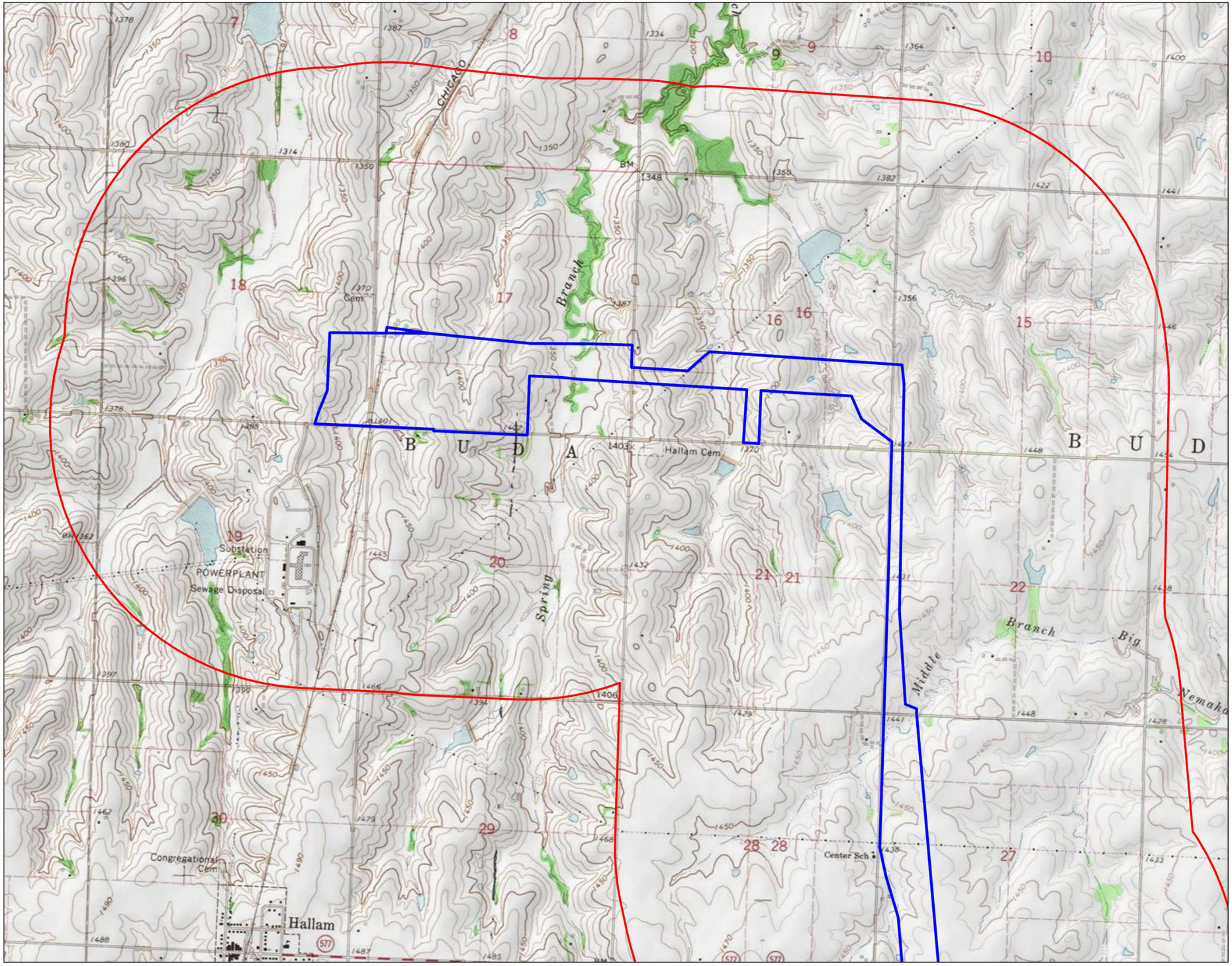

Figure No.

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Title

Project Location & 1-Mile Buffer
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-10
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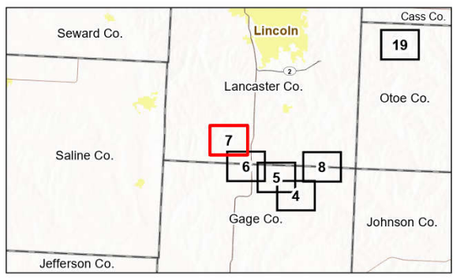

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Northern Natural Gas

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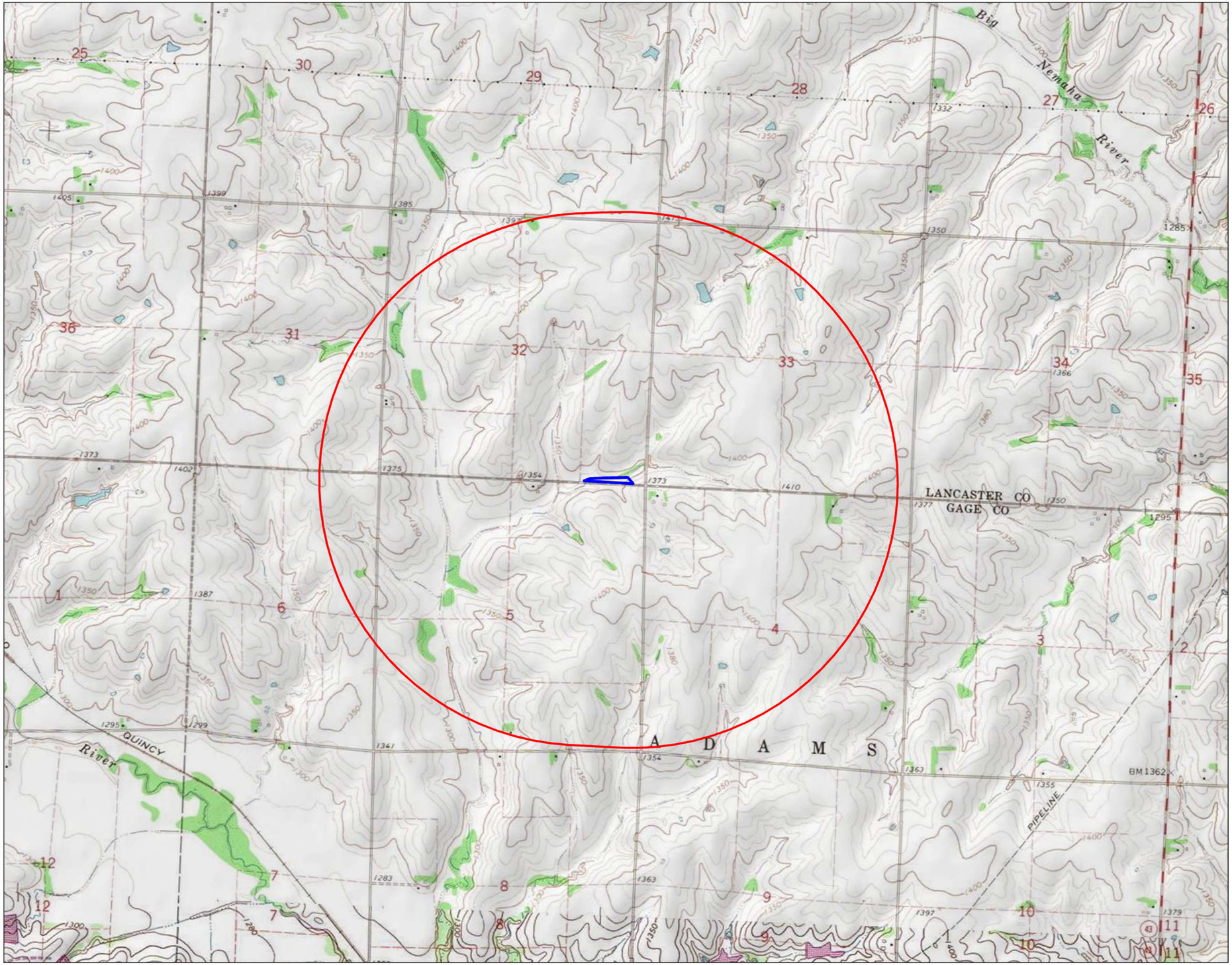

Figure No.

1

Title

Project Location & 1-Mile Buffer
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
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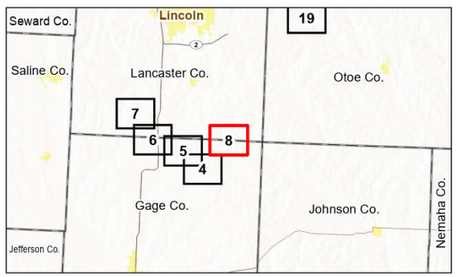
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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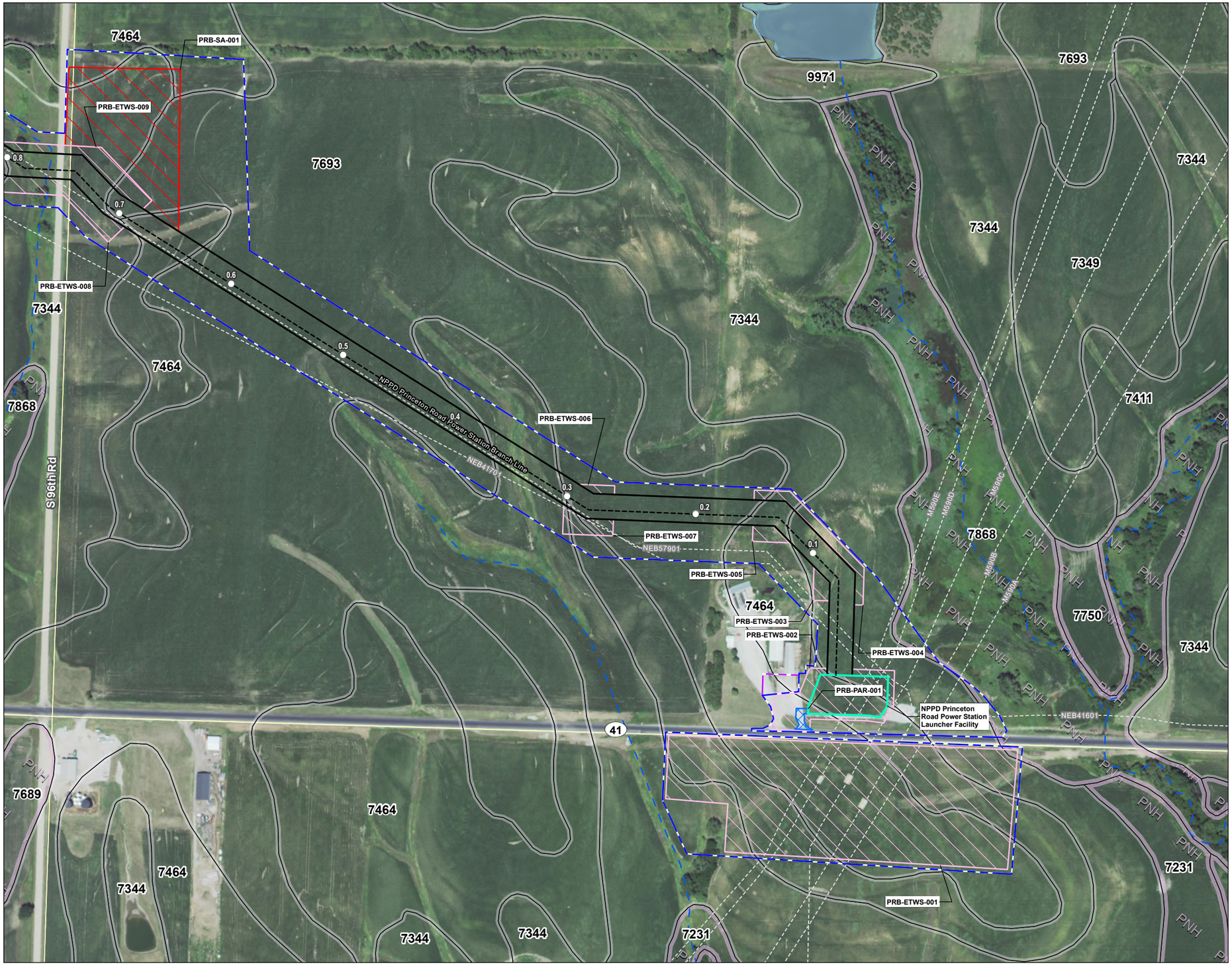


Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

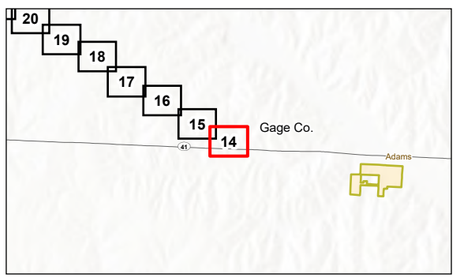
- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

NRCS Soil Survey Data
Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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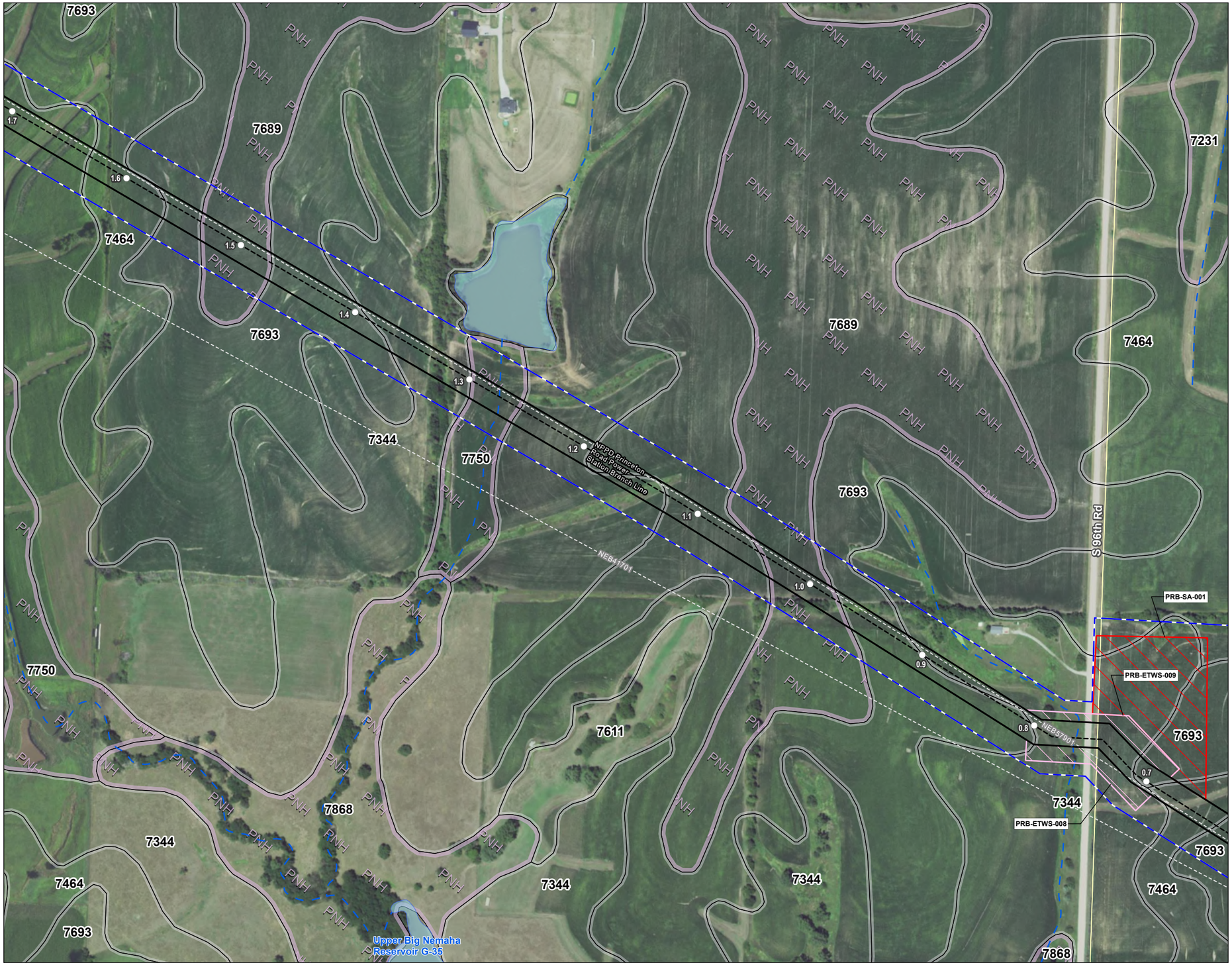

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

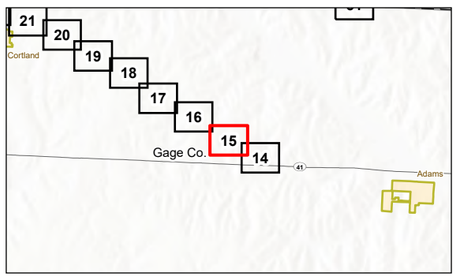
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

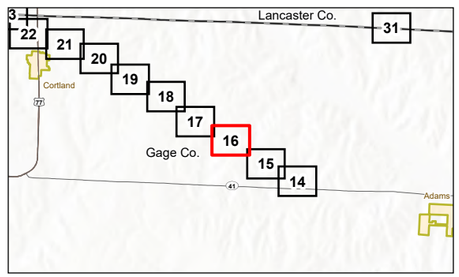
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

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Northern Natural Gas

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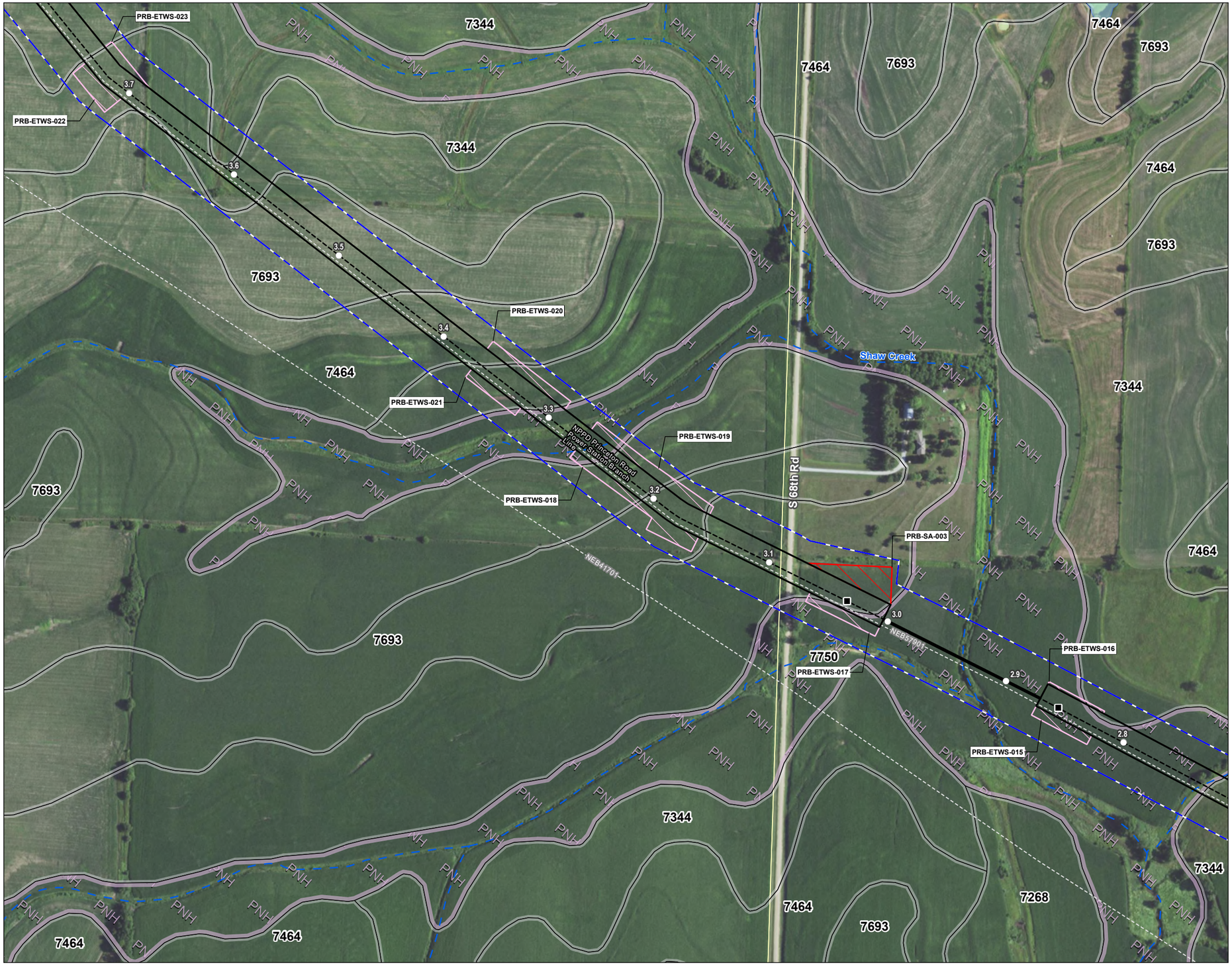

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

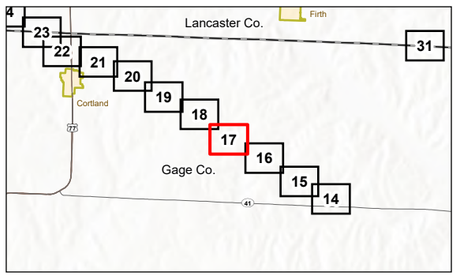
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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3. Background: NAIP 2022

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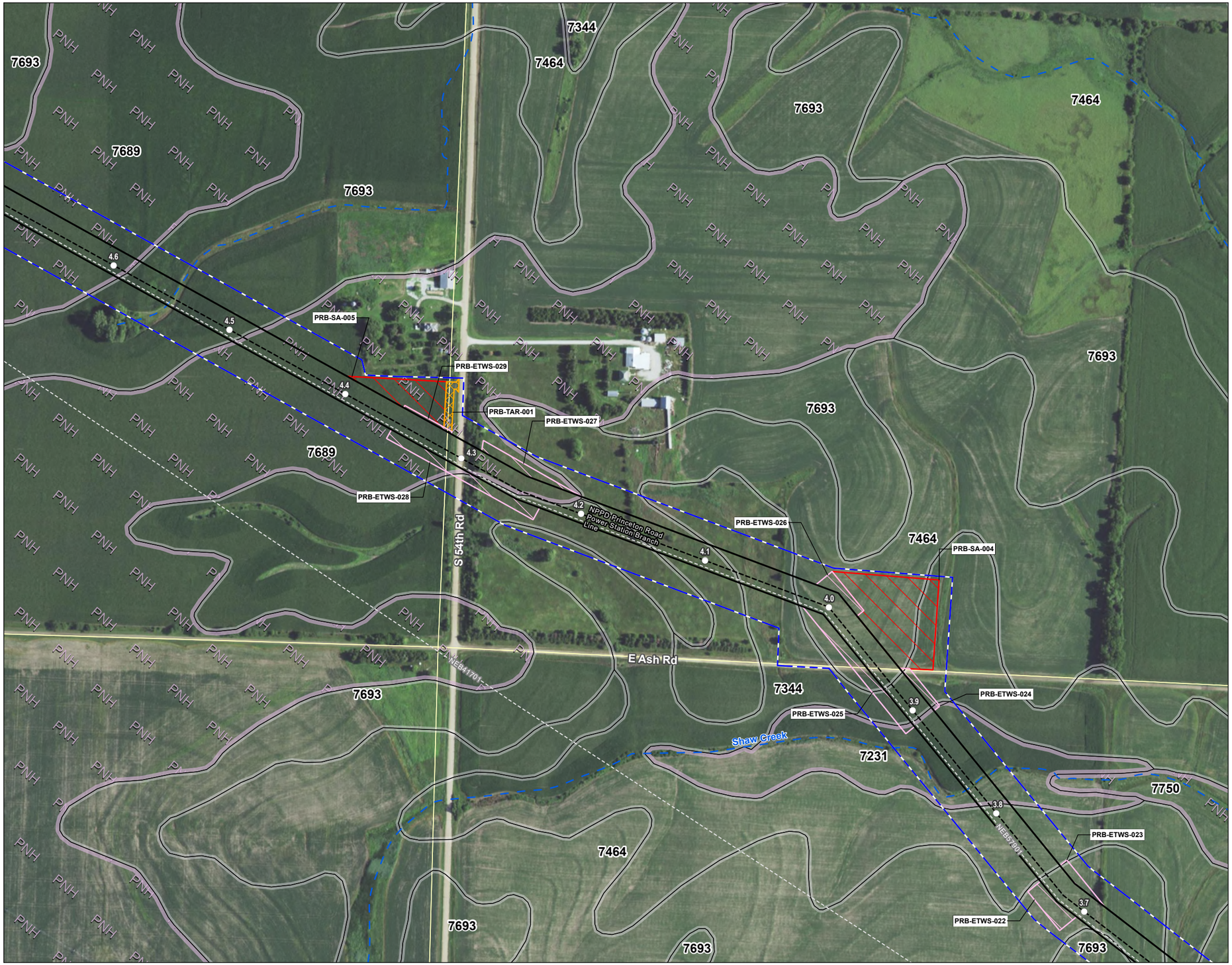

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

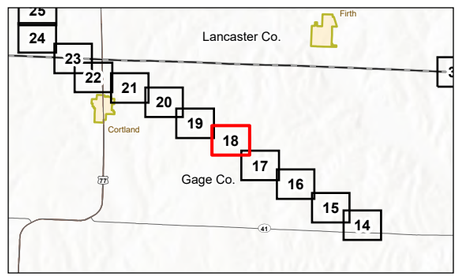
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace

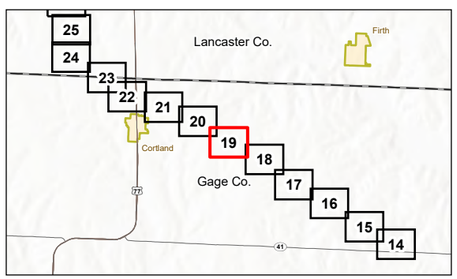
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

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Northern Natural Gas

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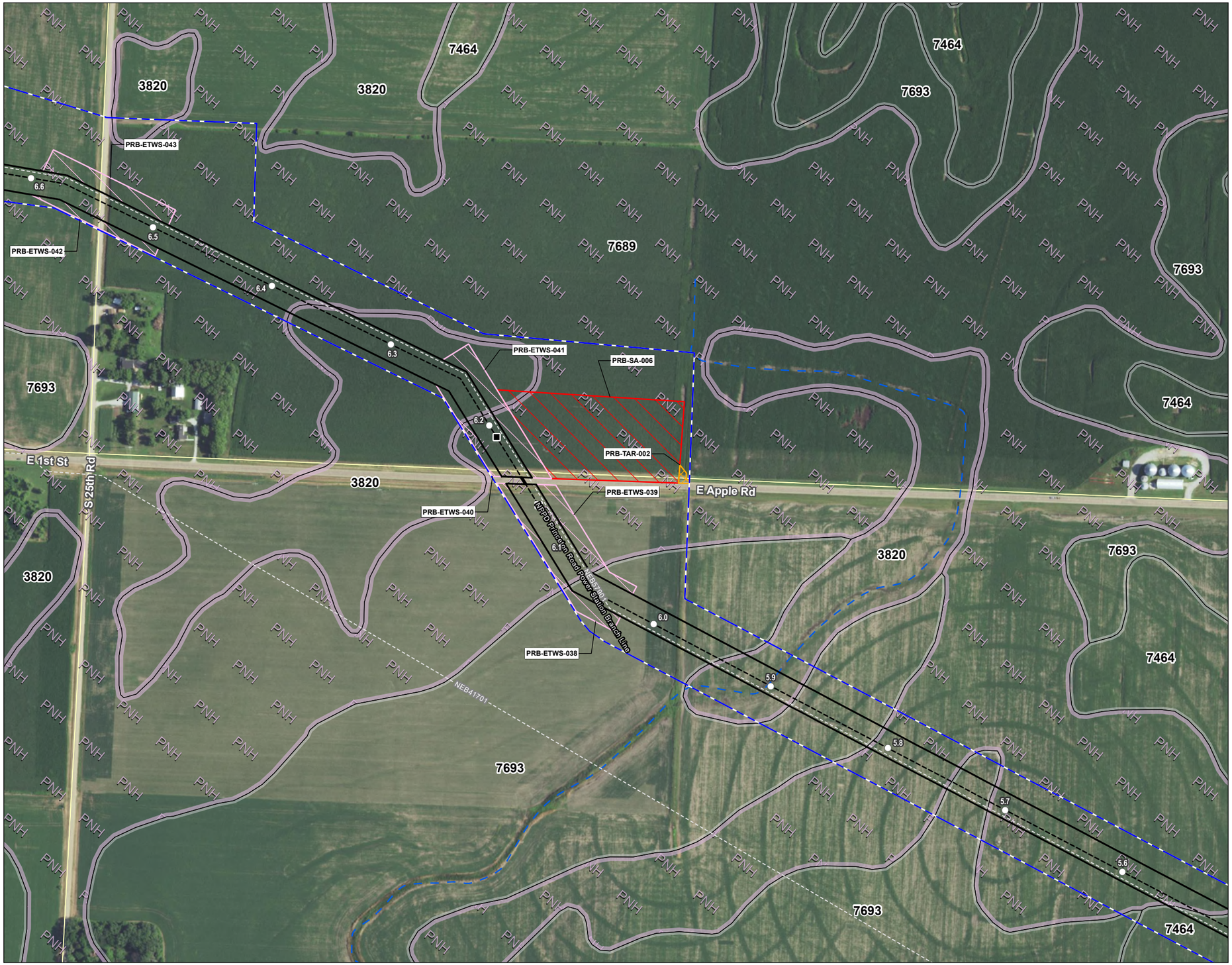


Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet

(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

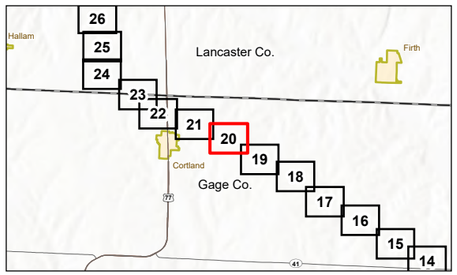
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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Revised: 2026-03-26 By: jmarty
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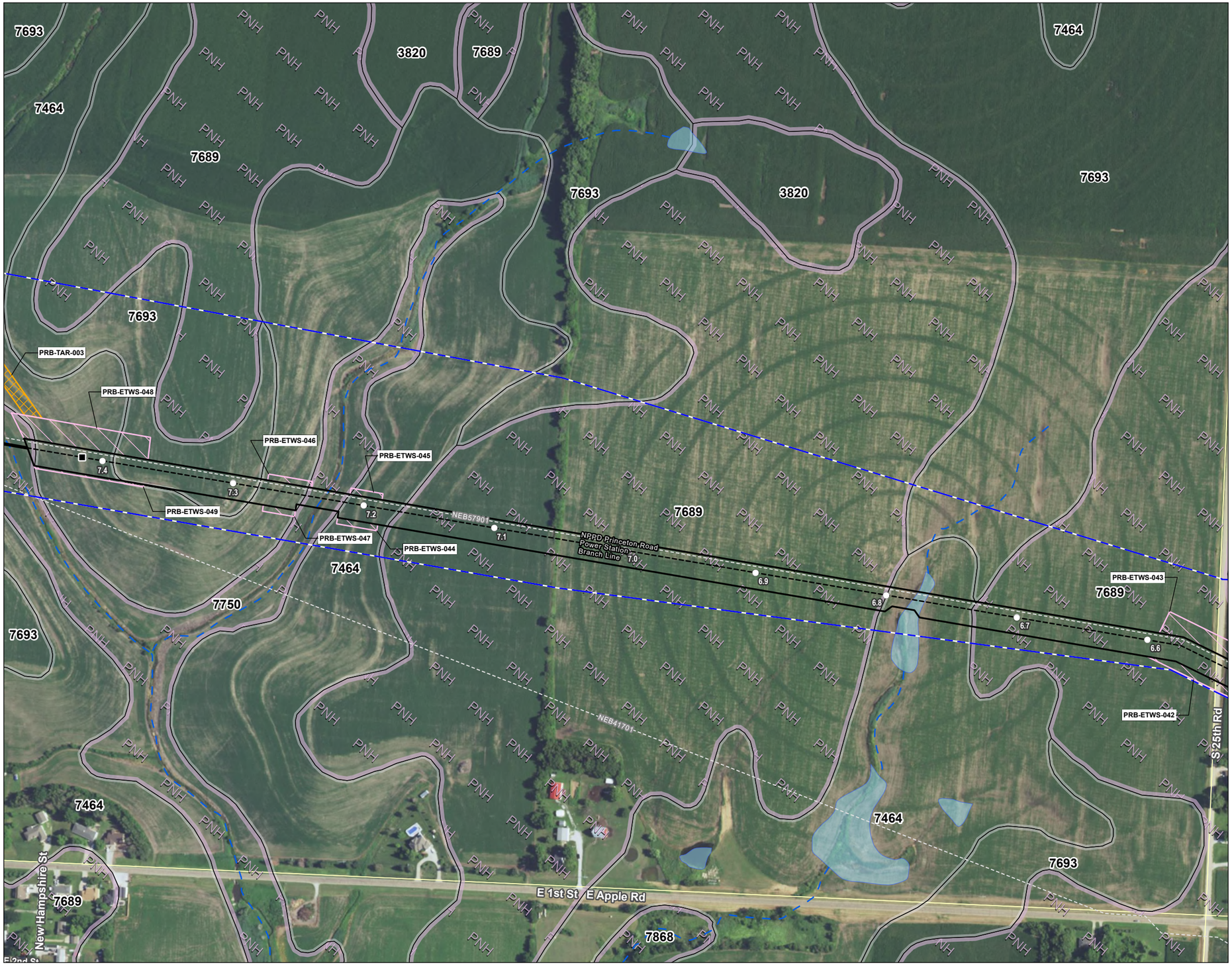

Figure No.
2

Title
NRCS Soil Survey Data
NPPD Princeton Road Power Station
Branch Line

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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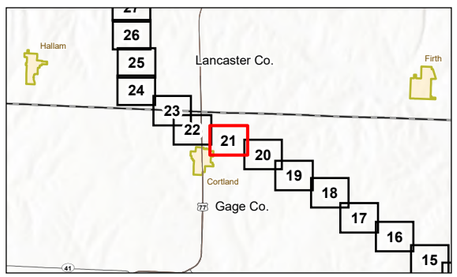
Legend
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road

NRCS Soil Survey Data
Hydric Soil Rating
- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road

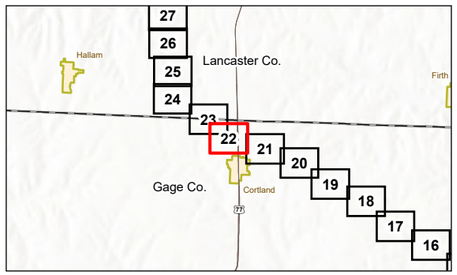
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Northern Natural Gas

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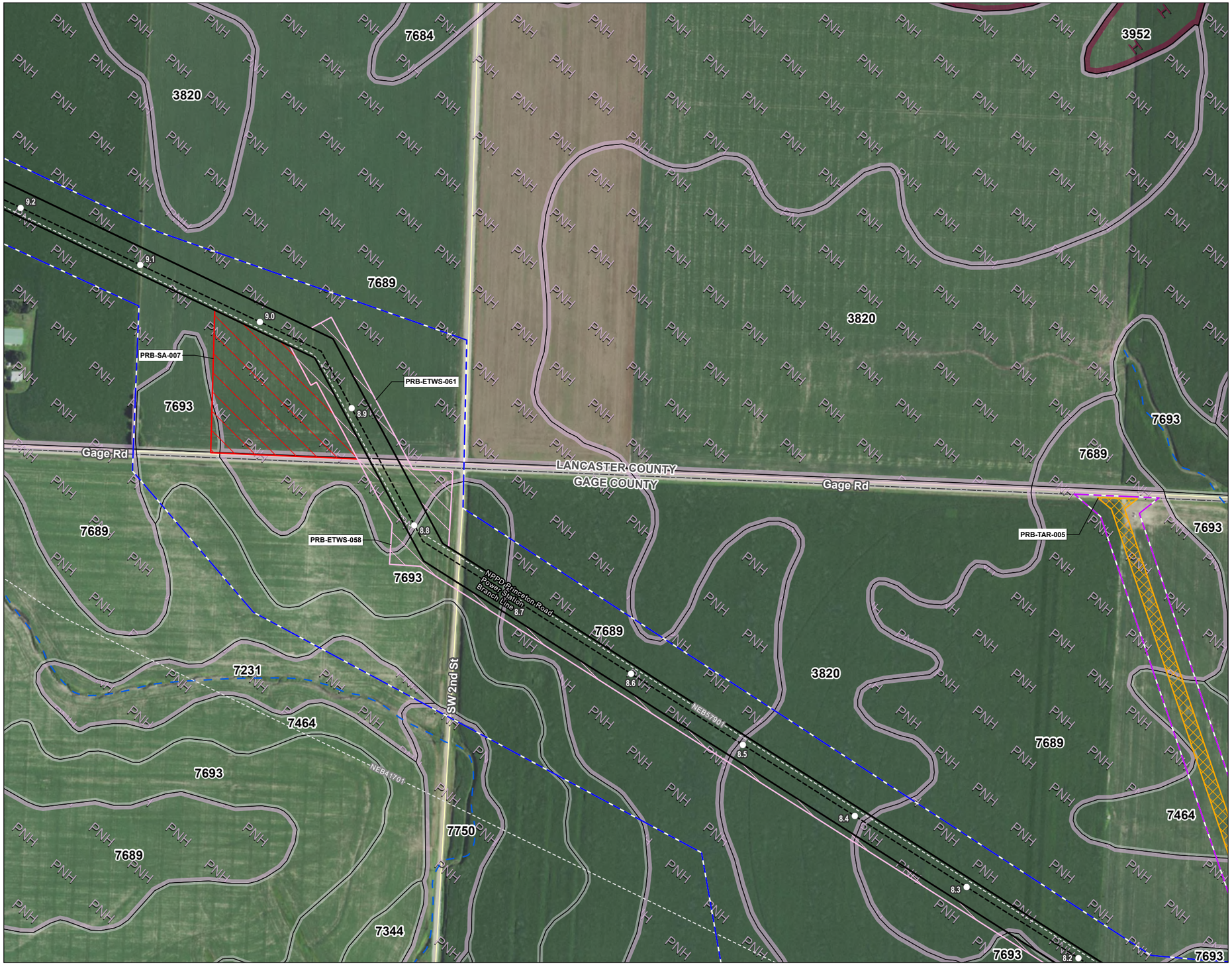

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
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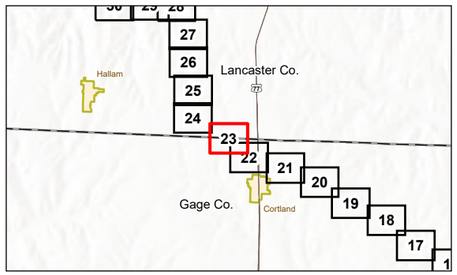
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Northern Natural Gas

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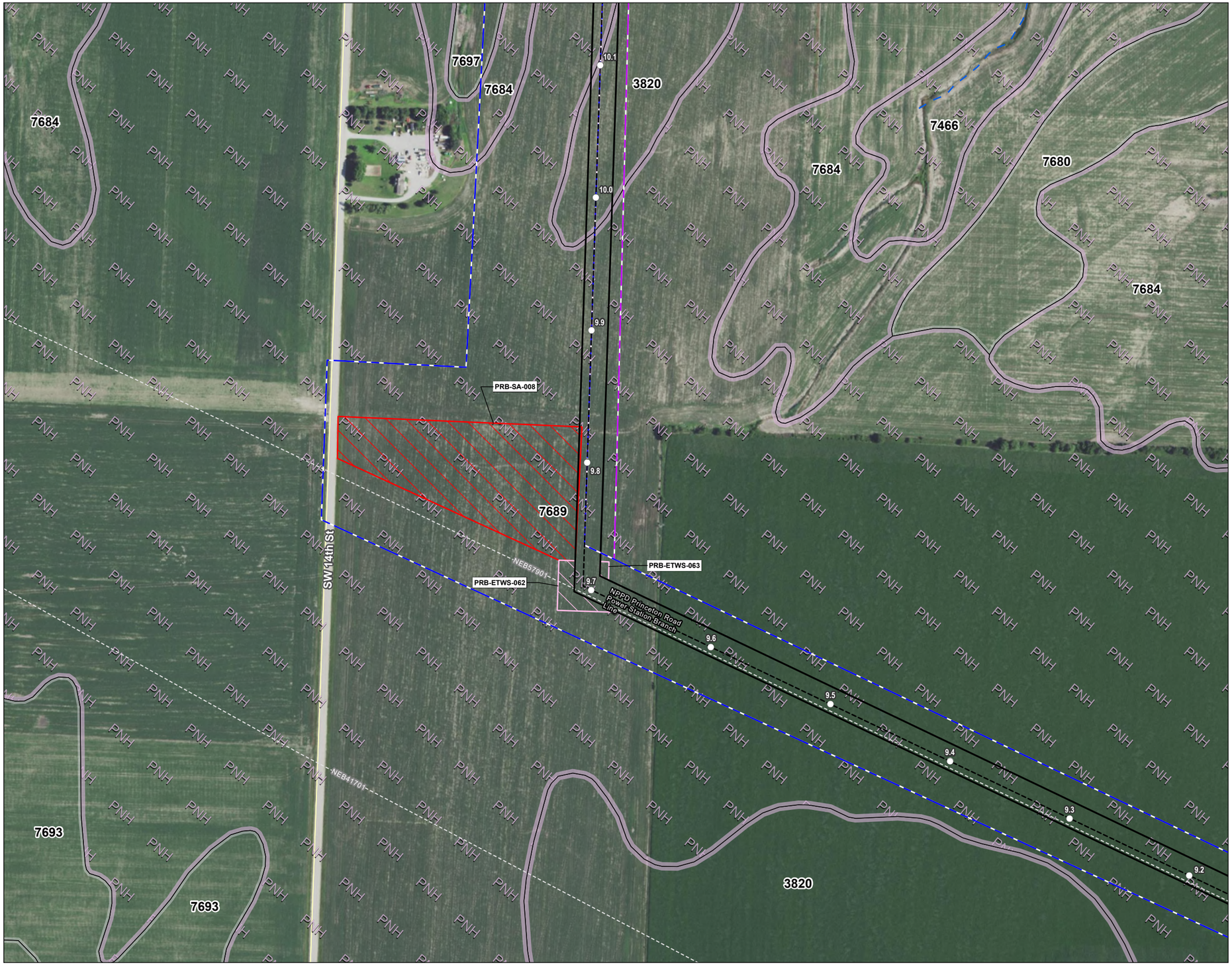


Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

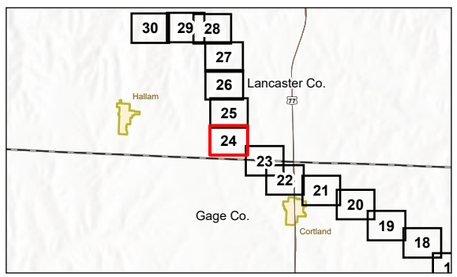
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road

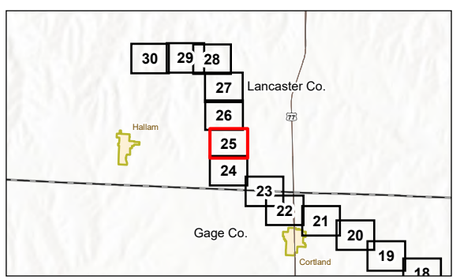
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

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Northern Natural Gas

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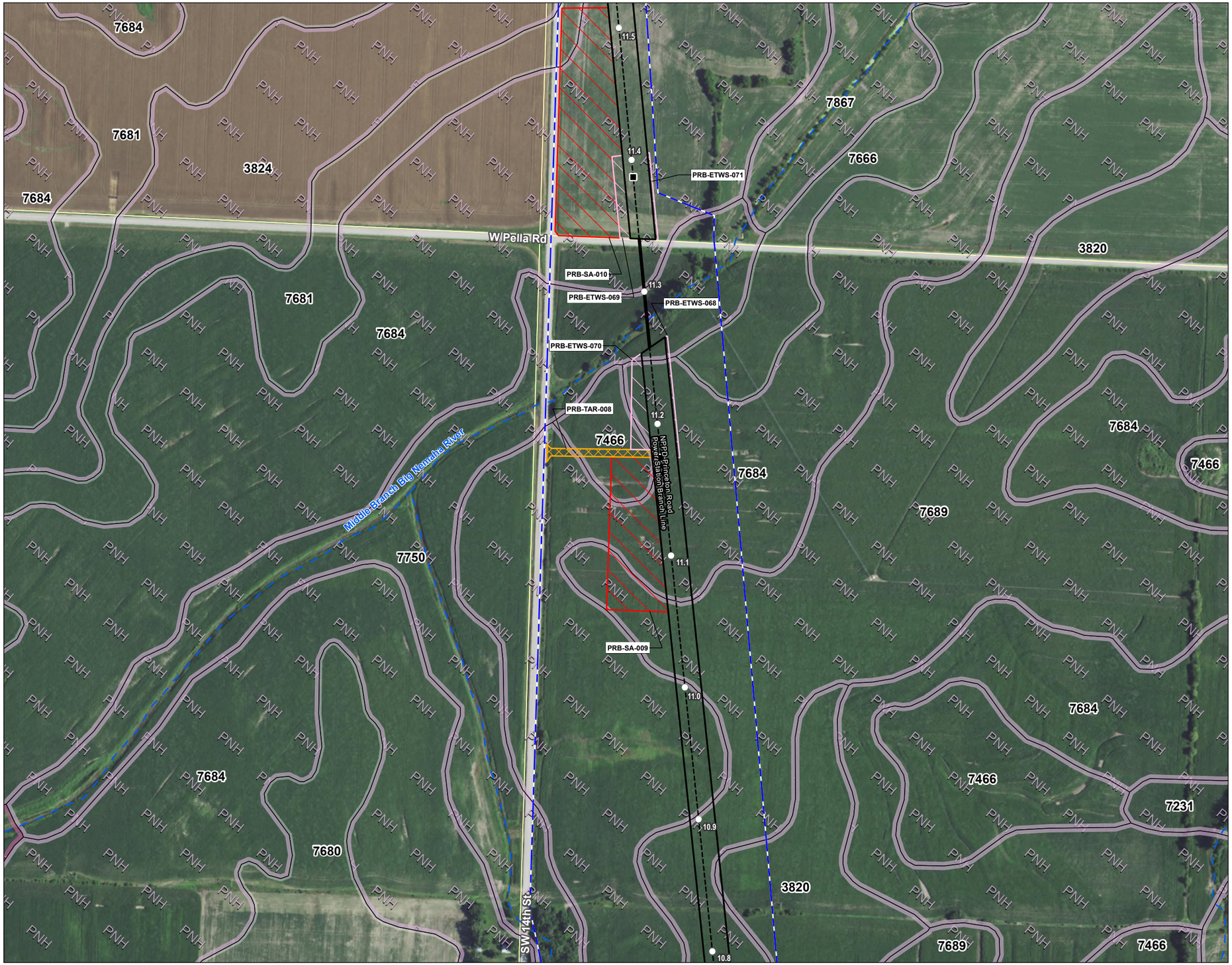

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

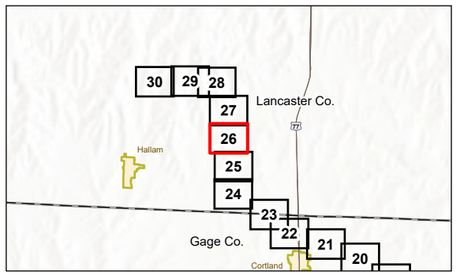
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Revised: 2026-03-26 By: jmarty
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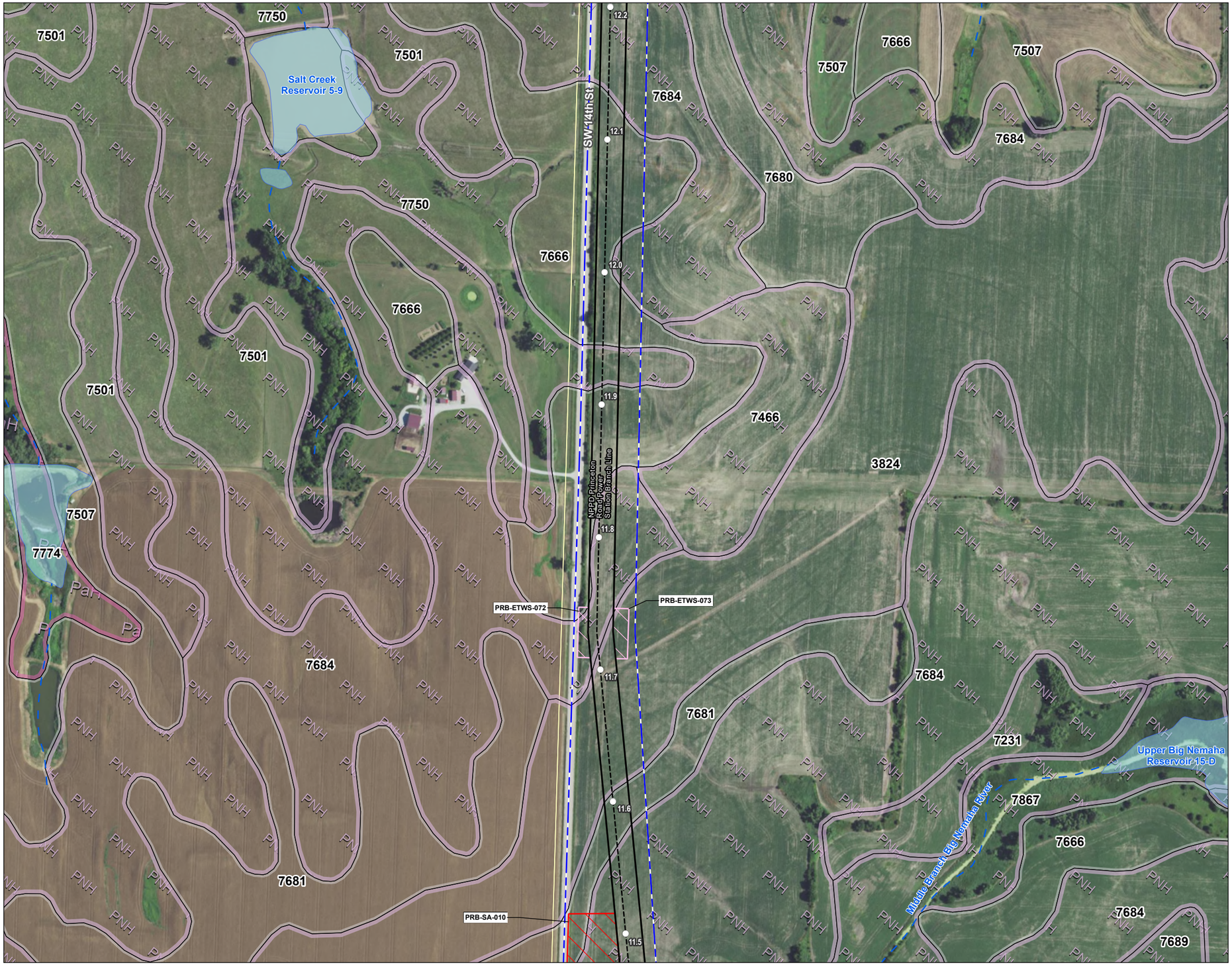

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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(At original document size of 11x17)
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Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

NRCS Soil Survey Data

Hydric Soil Rating

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- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
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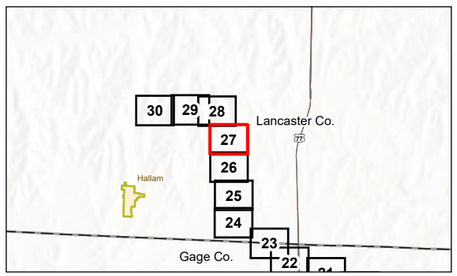
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

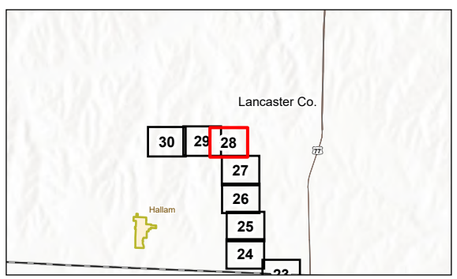
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace

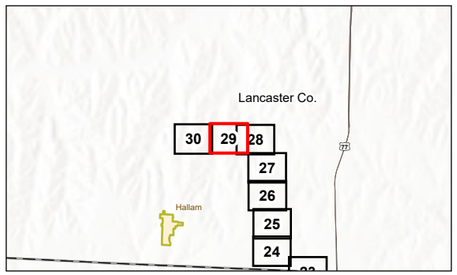
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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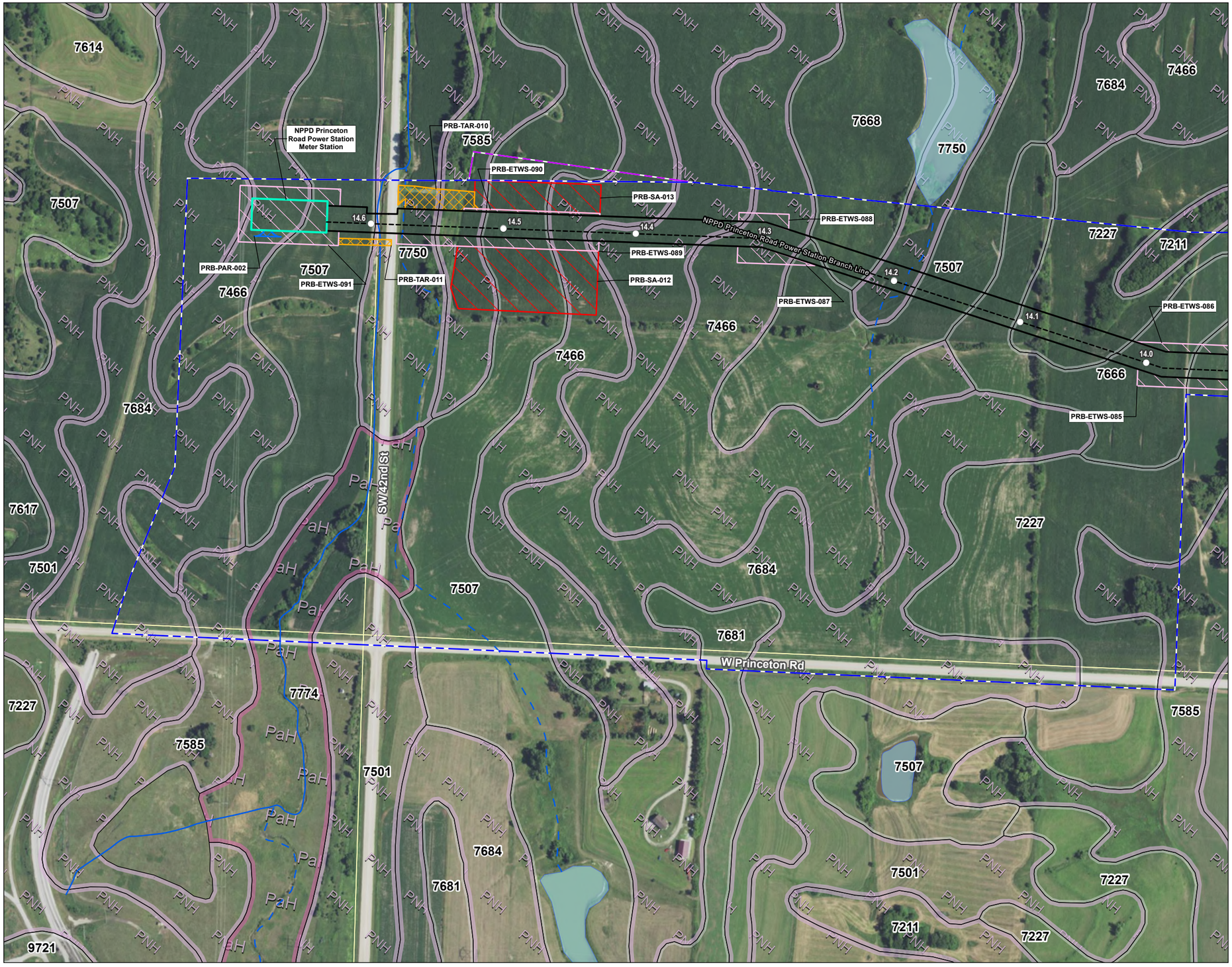

Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

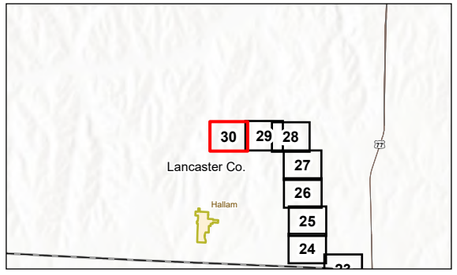
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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3. Background: NAIP 2022

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Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Extra Temporary Workspace

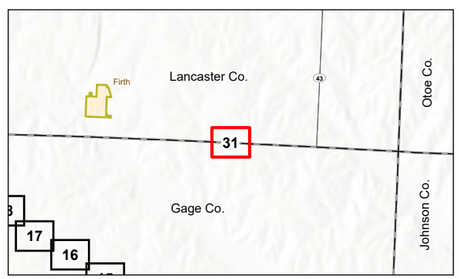
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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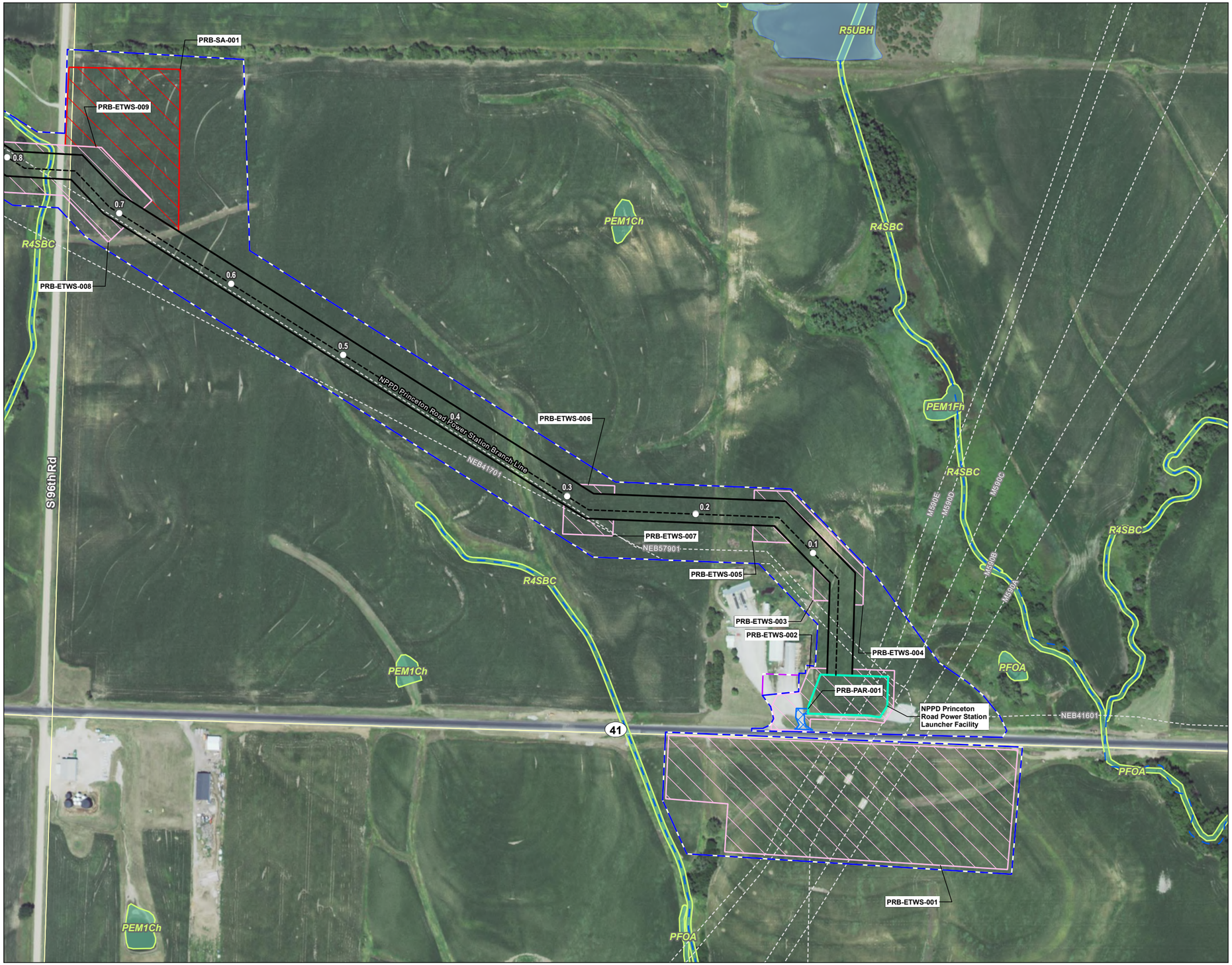

Figure No.

3

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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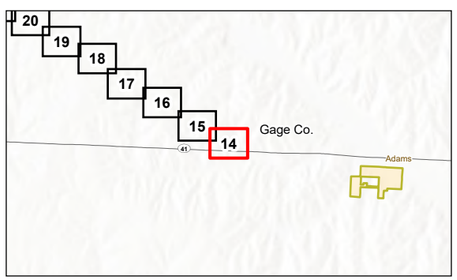
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
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N

0 200 400 Feet
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1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

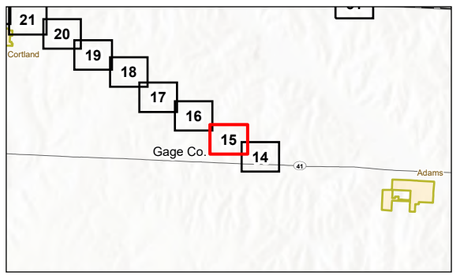

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Figure No.

3

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
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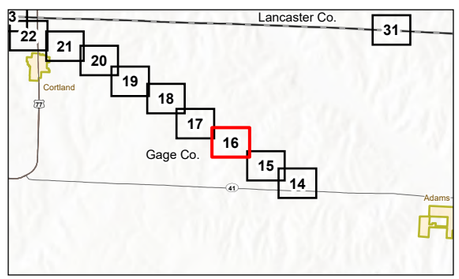

Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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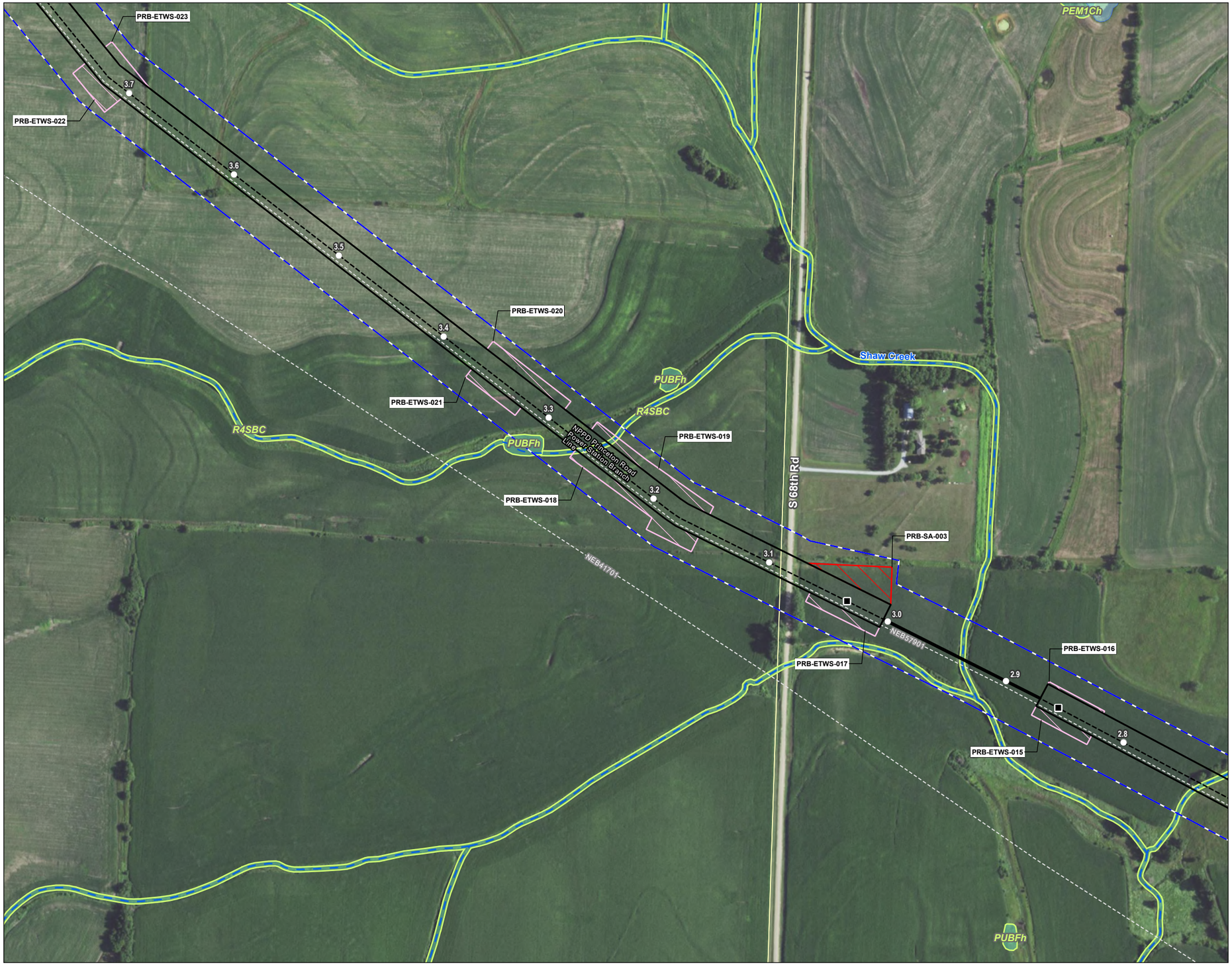

Figure No.
3

Title
National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
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- Staging Area
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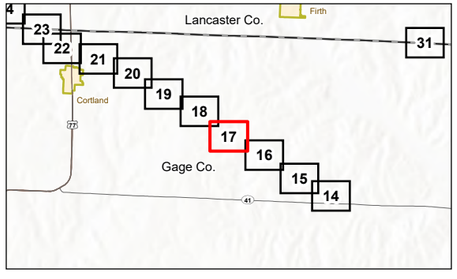
National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

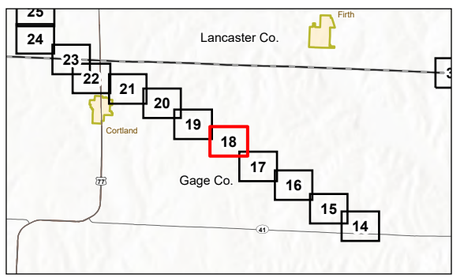
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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National Wetlands Inventory
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Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
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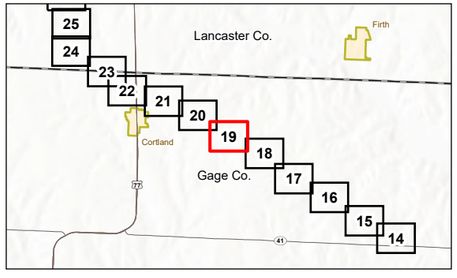

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National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

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Township of Nemaha
Gage County, Nebraska

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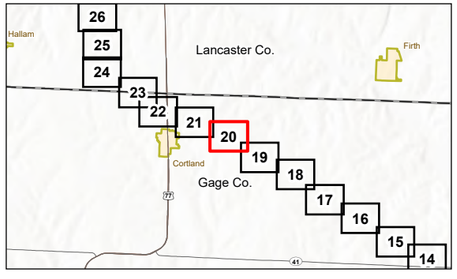

Notes
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Figure No.

3

Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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- Mile Post
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- Perennial Stream
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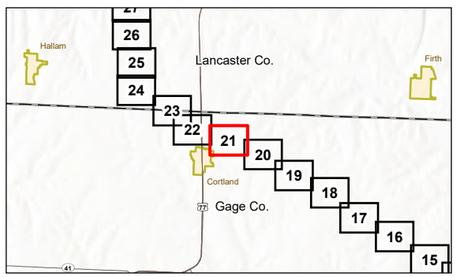

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Figure No.

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National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
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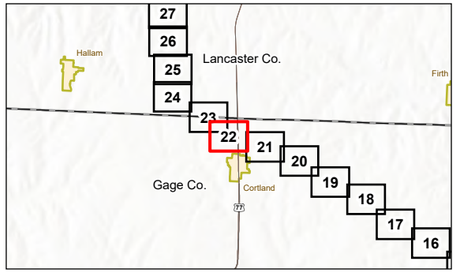

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Northern Natural Gas

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Figure No.

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Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
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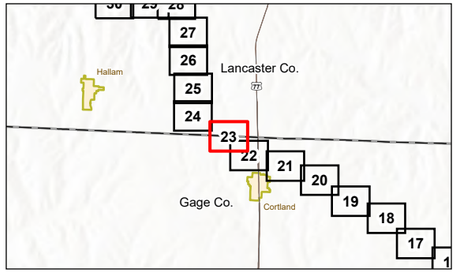

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Figure No.

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Title

National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

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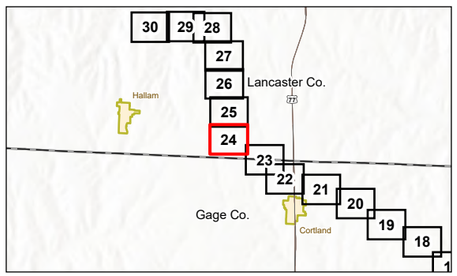

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Project Location
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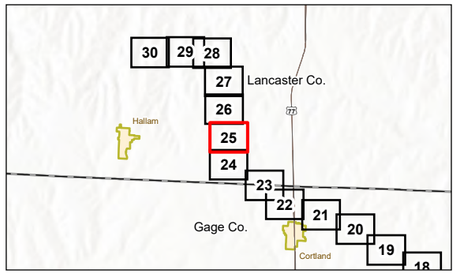

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National Wetlands Inventory
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
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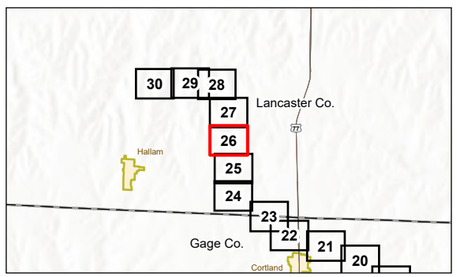

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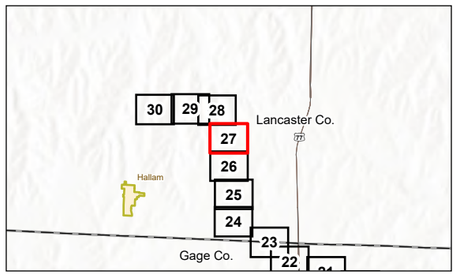

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National Wetlands Inventory
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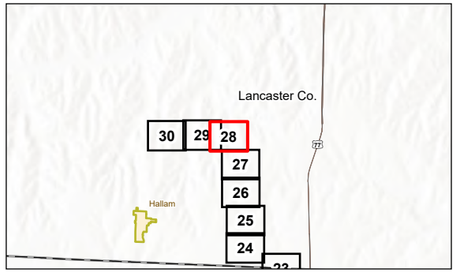

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NPPD Princeton Road Power Station Branch Line

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Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

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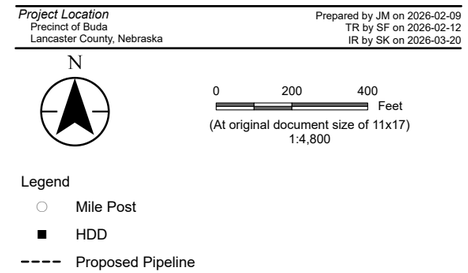

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National Wetlands Inventory NPPD Princeton Road Power Station Branch Line

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Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

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Legend

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- Environmental Survey Boundary
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- Permanent Access Road
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National Hydrography Dataset

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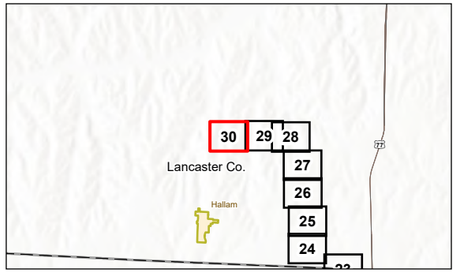

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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
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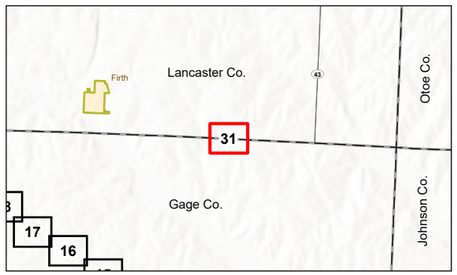
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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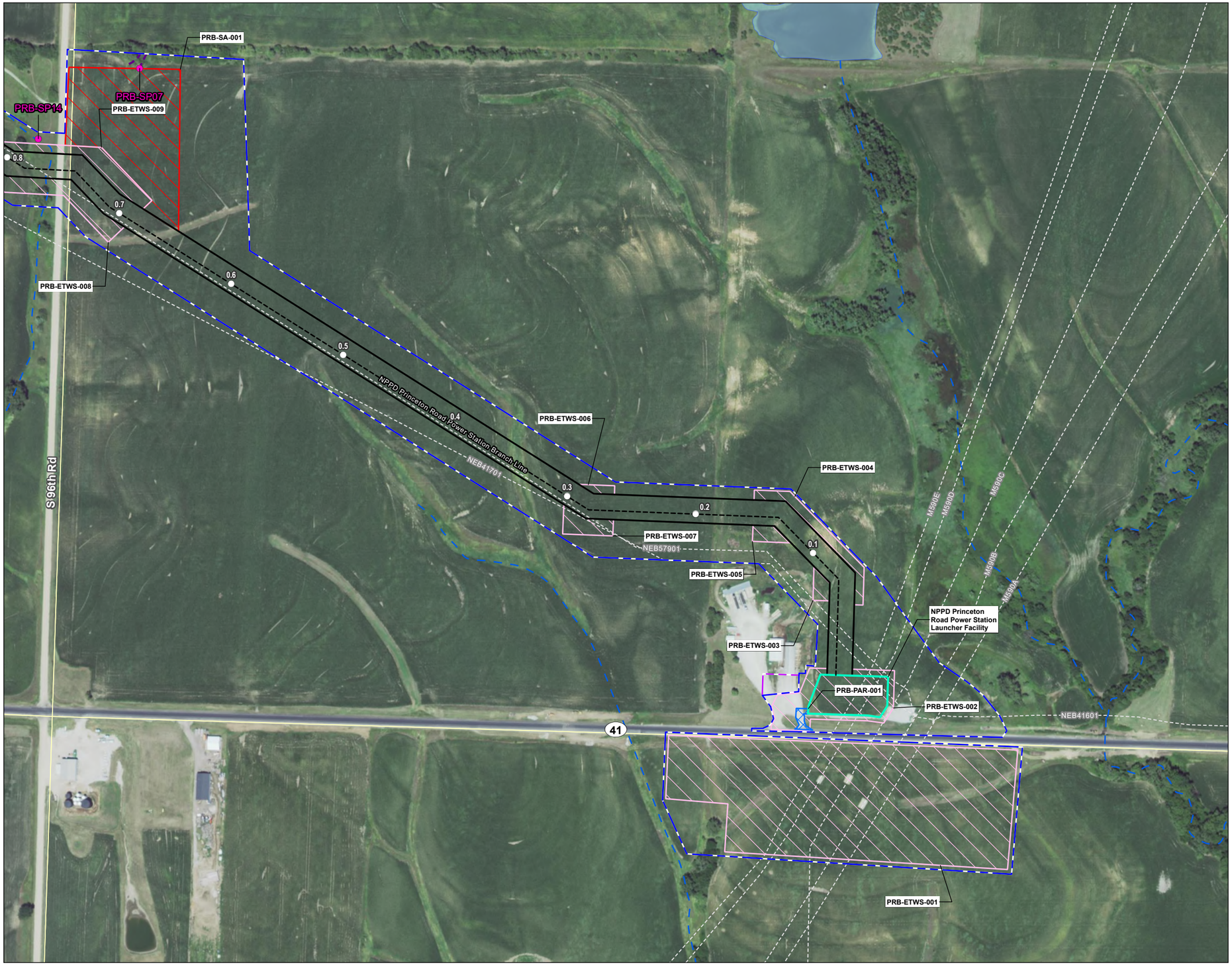


Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

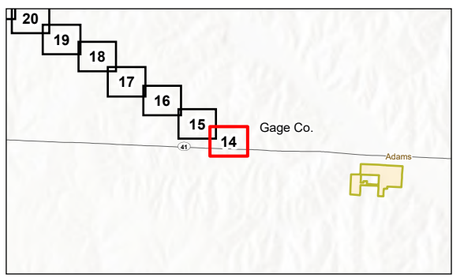
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Sample Point
- Upland Drainage Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

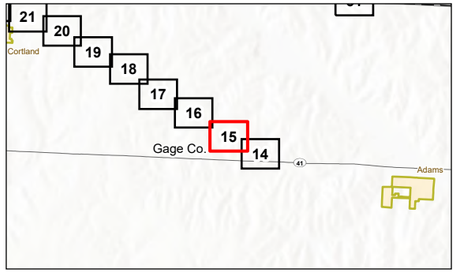
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Sample Point
- Upland Drainage Feature
- Field Delineated Open Water

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

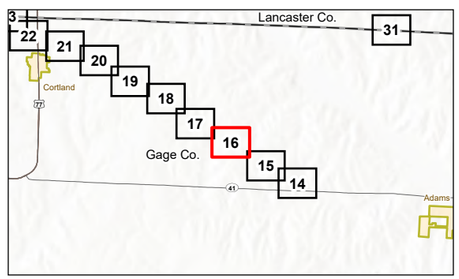
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

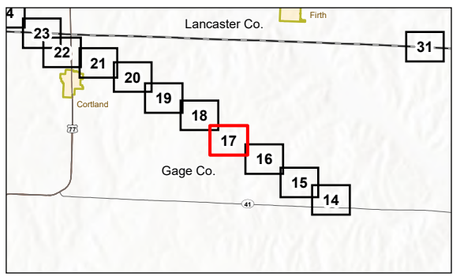
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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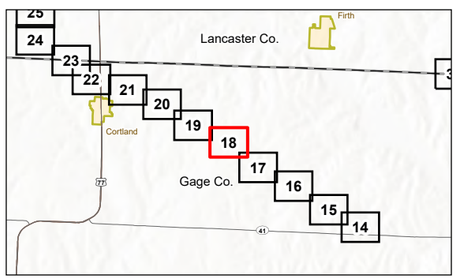
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

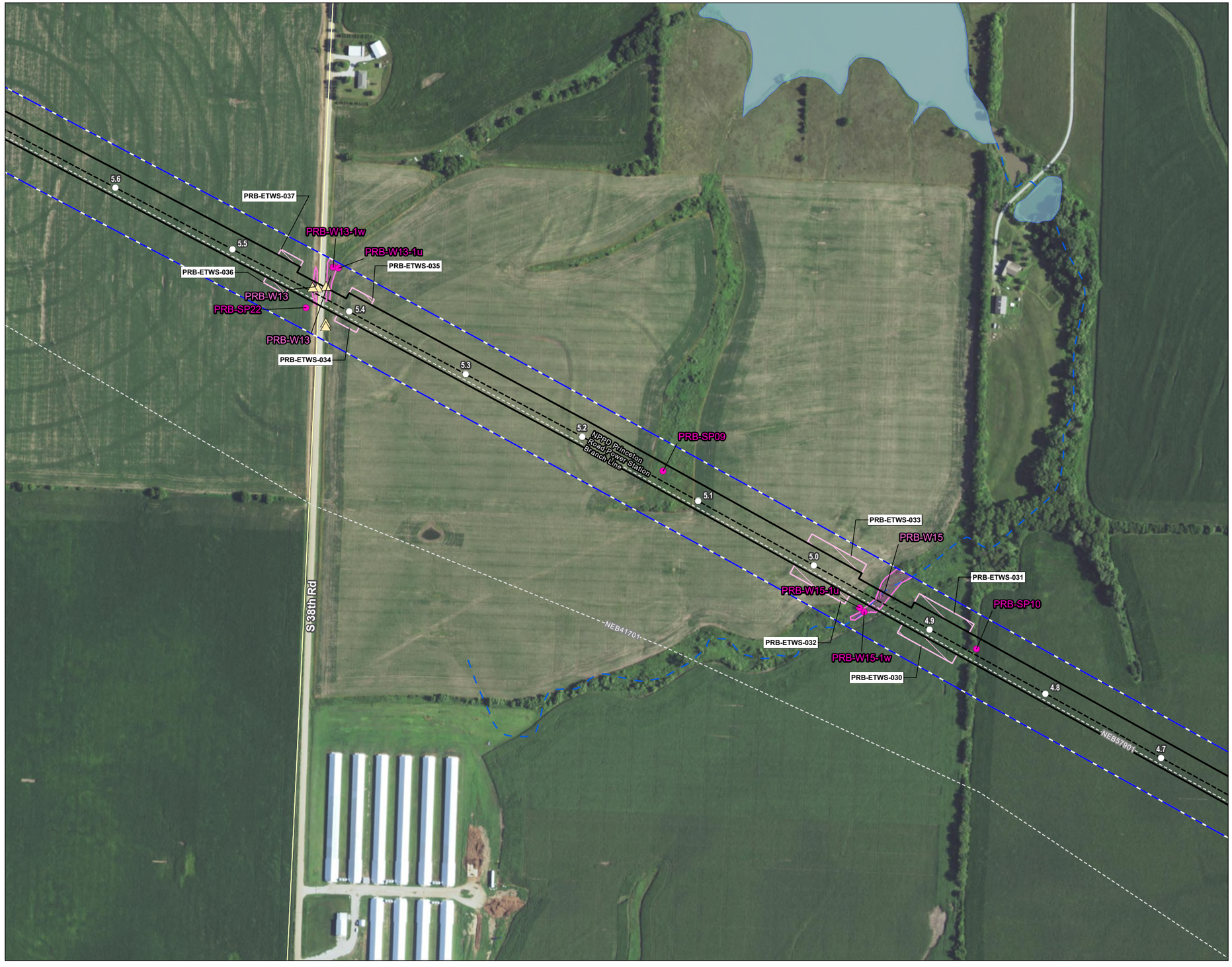
Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20



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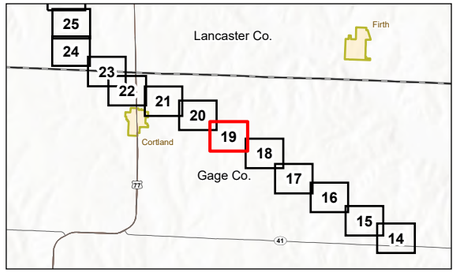
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2022

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Nemaha
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

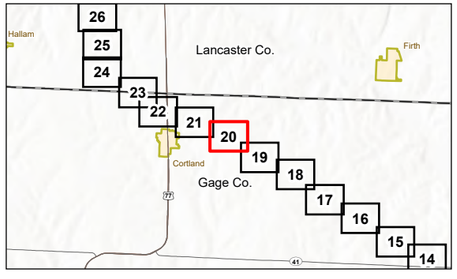
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Upland Drainage Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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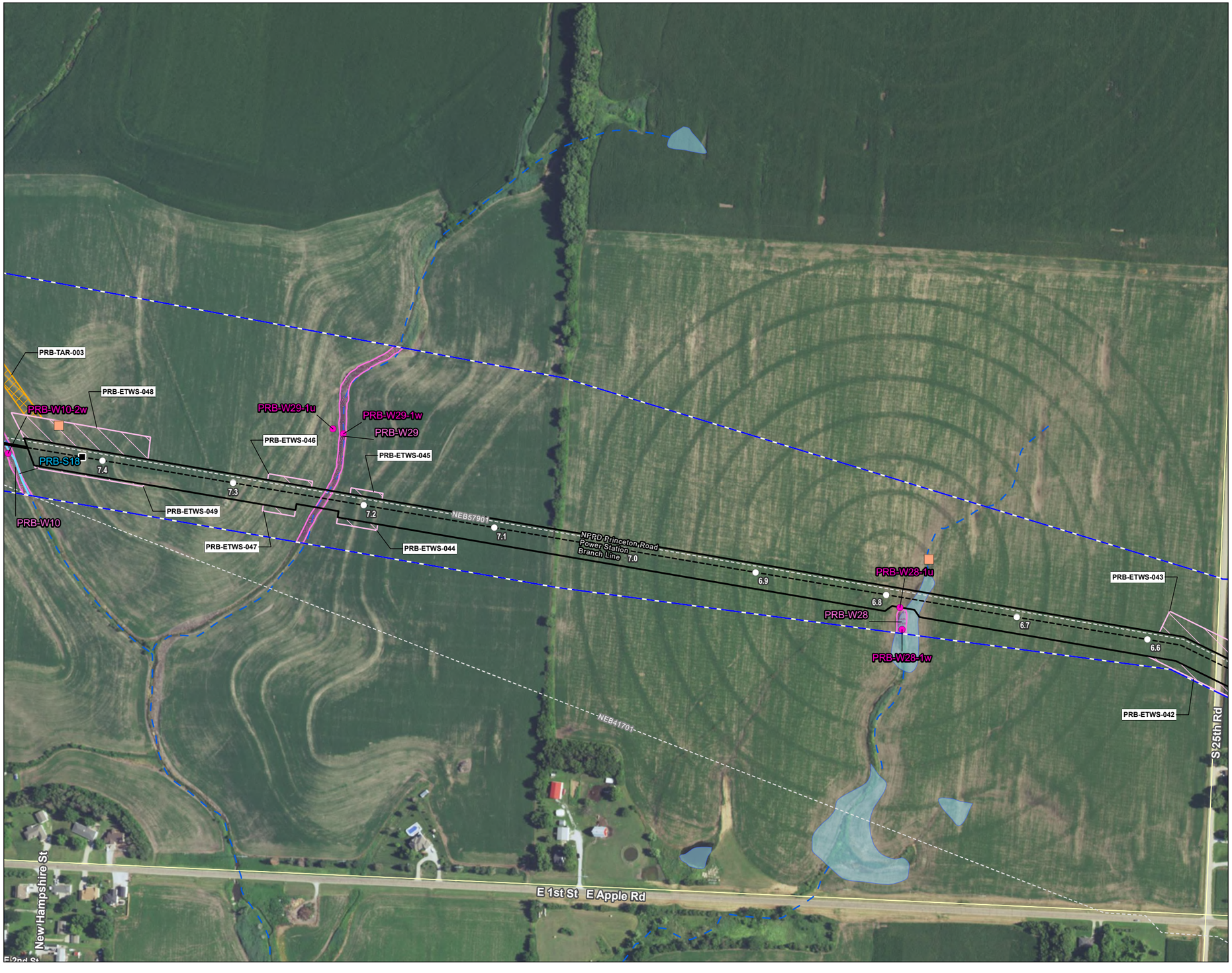

Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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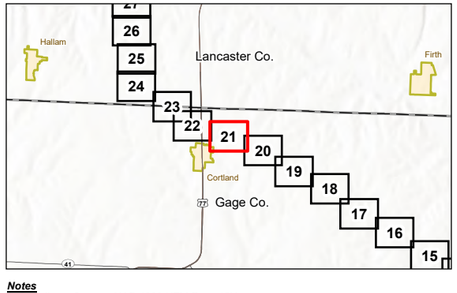
Legend

- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Sample Point
- Storm Drain
- Field Delineated Waterway Line
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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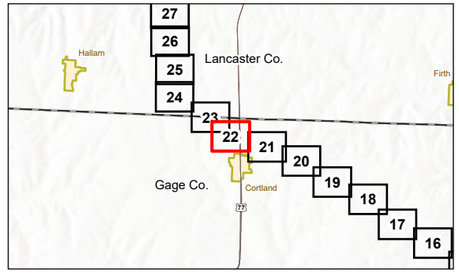
Legend
- Mile Post
- HDD
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Wetland

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Storm Drain

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

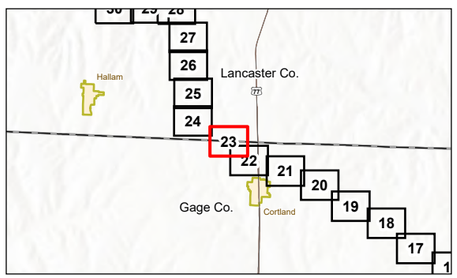

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody

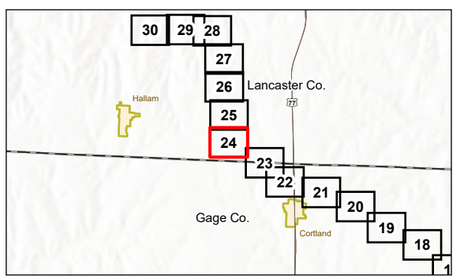

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Figure No.
4

Title
Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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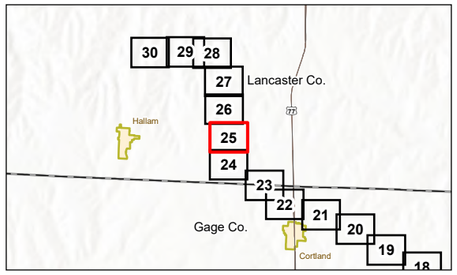
Legend
- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station
Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

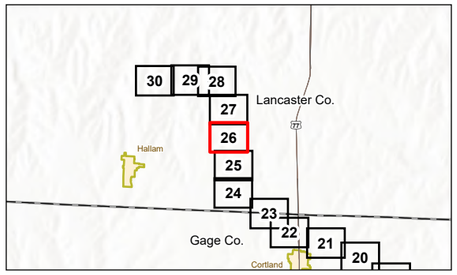
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Sample Point
- Storm Drain
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172601\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

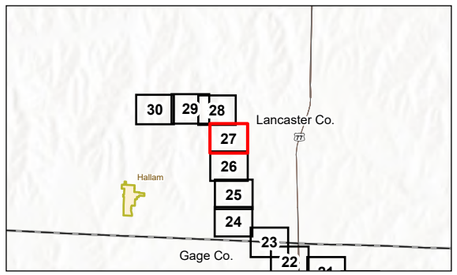
Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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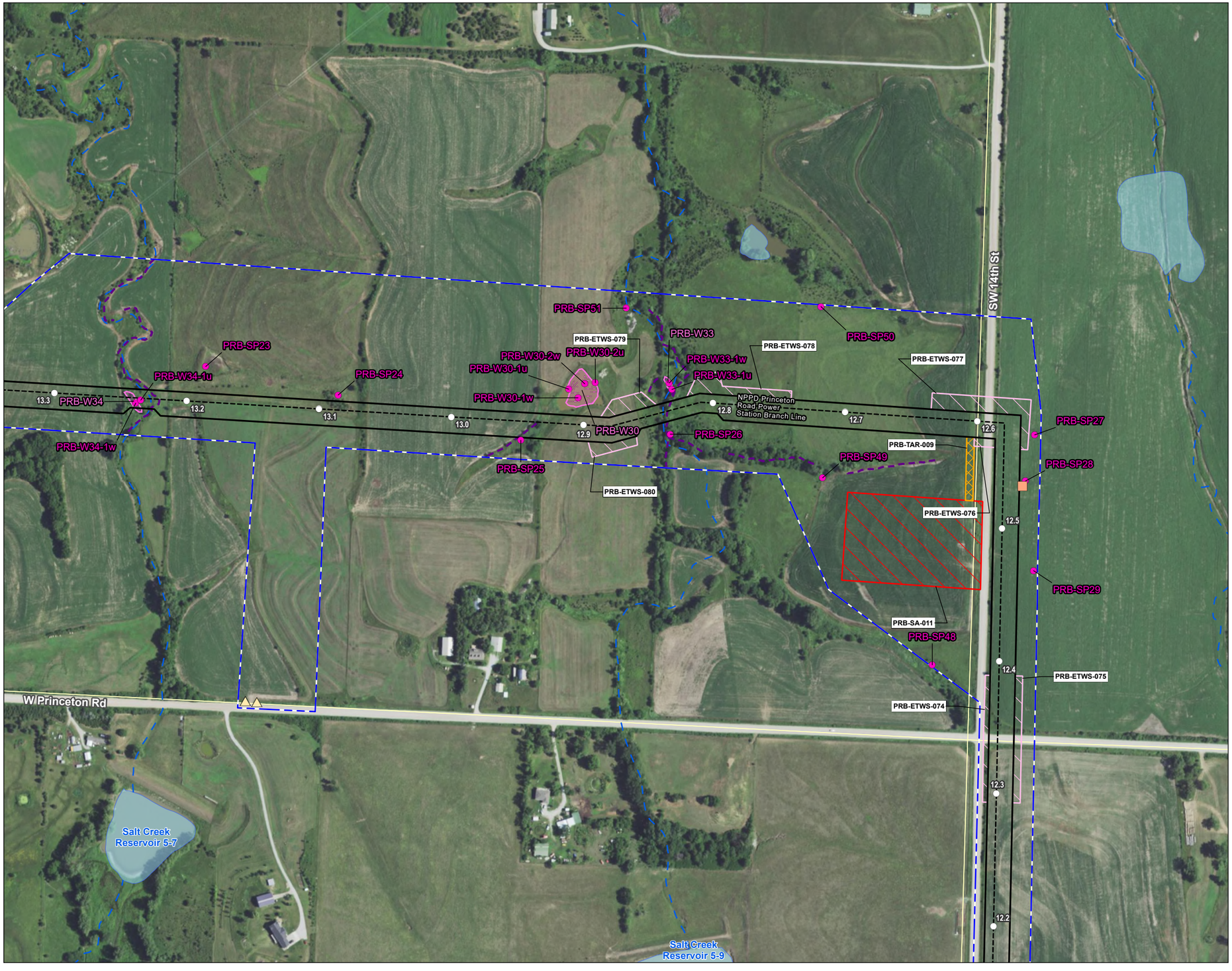


Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet

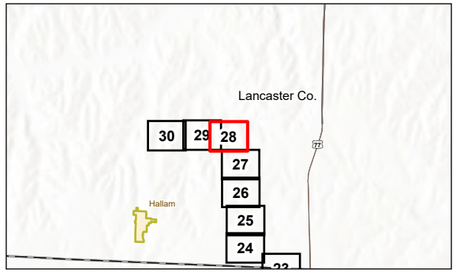
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Storm Drain
- Upland Drainage Feature
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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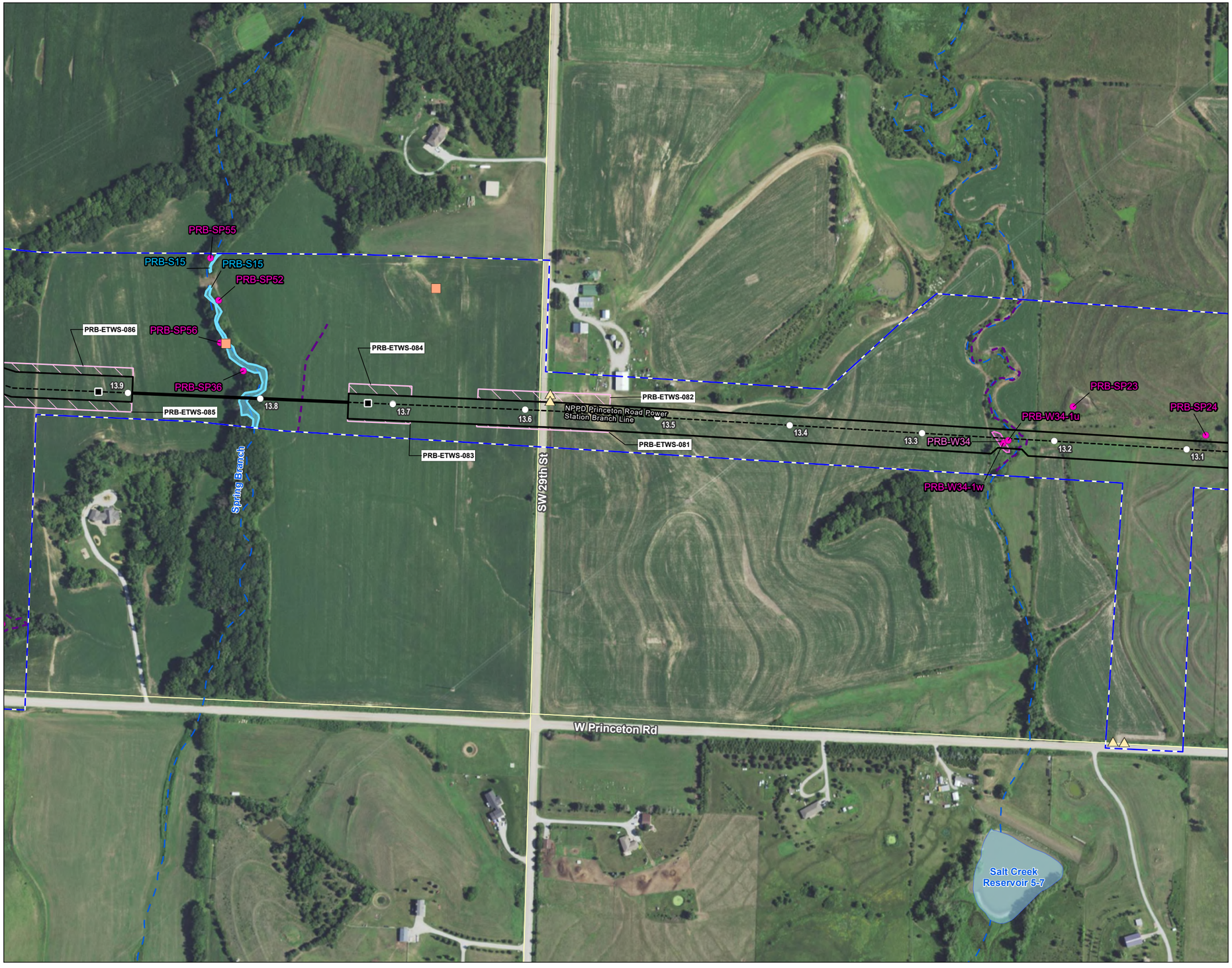

Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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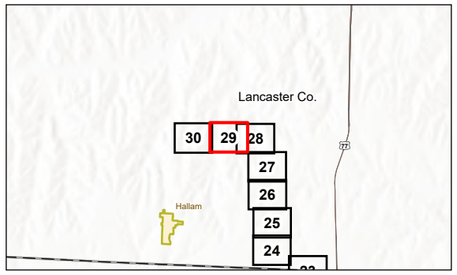
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- HDD
- Proposed Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point
- Storm Drain
- Upland Drainage Feature
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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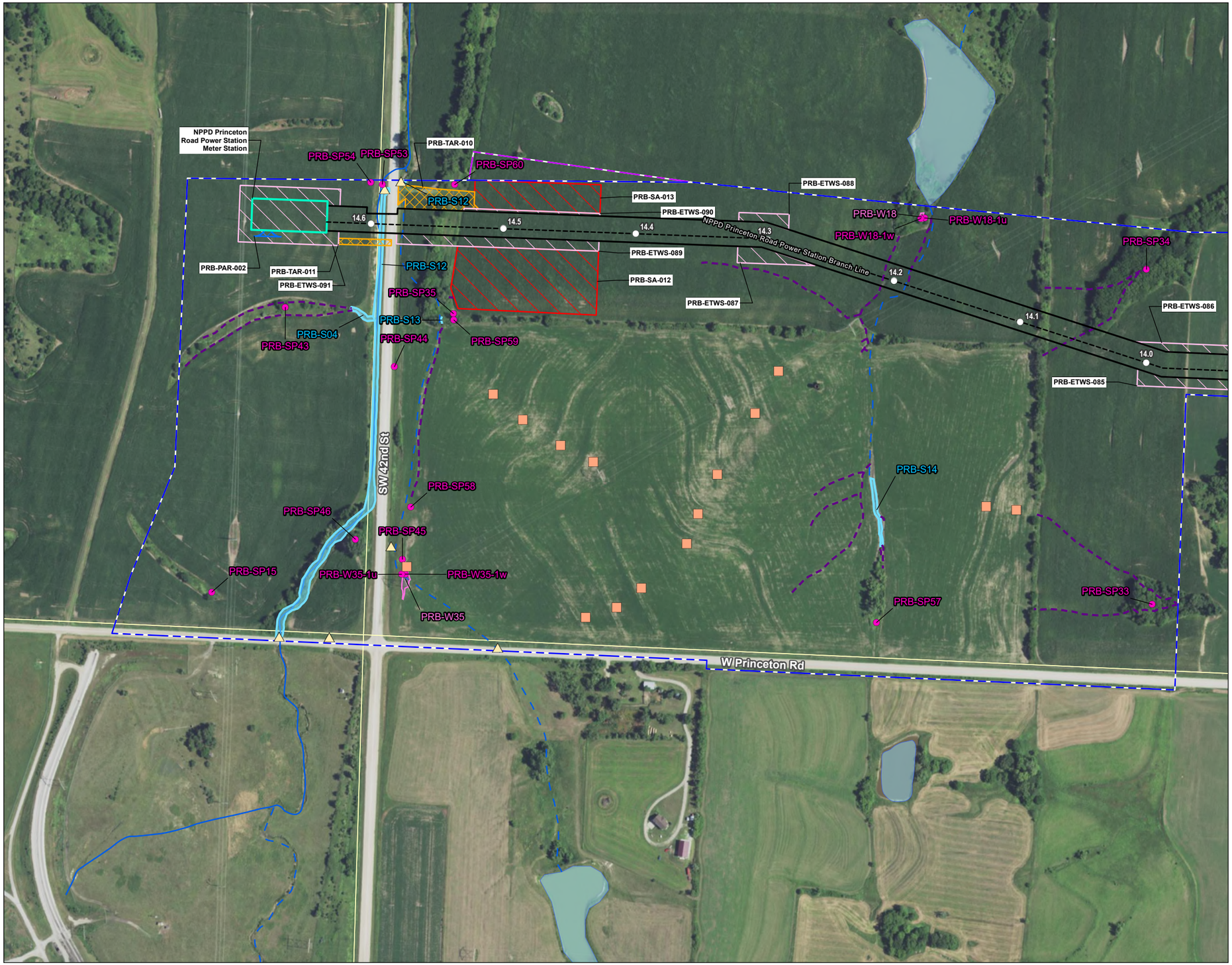


Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of Buda
Lancaster County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

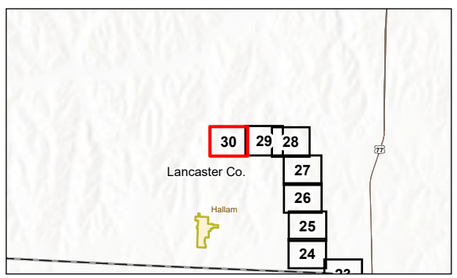
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Environmental Survey Boundary
- Environmental Survey Boundary To Be Surveyed
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Storm Drain
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
NPPD Princeton Road Power Station Branch Line

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Highland
Lancaster & Gage Counties, Nebraska

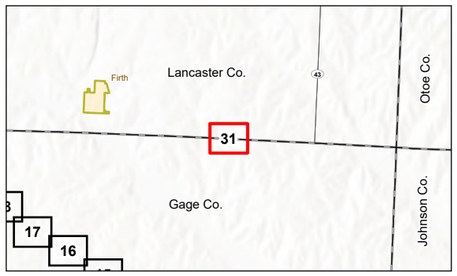
Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Extra Temporary Workspace

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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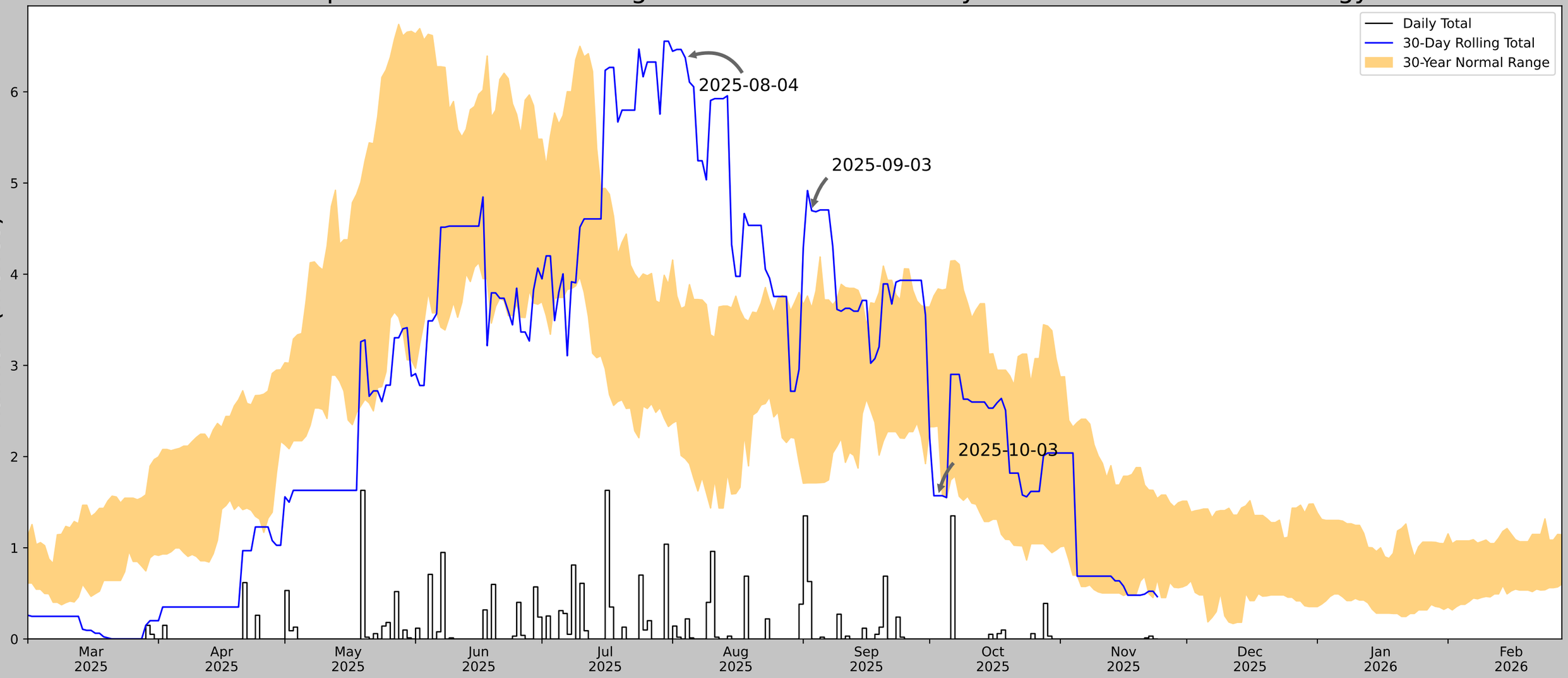
Appendix B – Precipitation Analysis

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.56125, -96.76914
Observation Date	2025-10-03
Elevation (ft)	1387.061
Drought Index (PDSI)	Mild wetness
WebWIMP H_2O Balance	Dry Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-10-03	2.335433	3.838977	1.570866	Dry	1	3	3
2025-09-03	1.711417	3.630315	4.696851	Wet	3	2	6
2025-08-04	1.977559	3.644882	6.374016	Wet	3	1	3
Result							Normal Conditions - 12

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

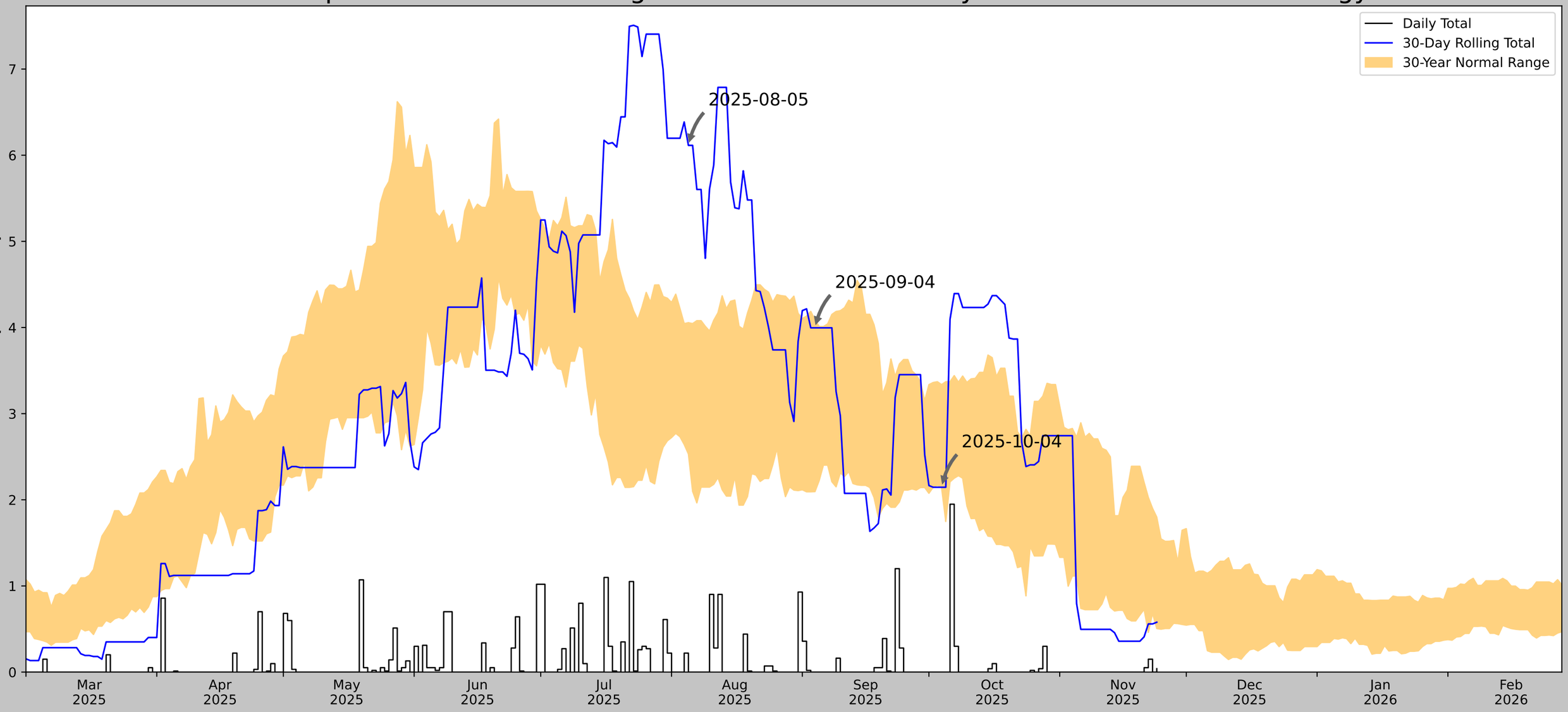
US Army Corps of Engineers

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	6.329	72.913	3.309	10782	89
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	0
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	0
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
MILFORD 5.9 SSE	40.6908, -97.0265	1383.858	9.873	76.116	5.194	1	1
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.48622, -96.62704
Observation Date	2025-10-04
Elevation (ft)	1379.529
Drought Index (PDSI)	Moderate drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-10-04	2.141339	3.337008	2.145669	Normal	2	3	6
2025-09-04	2.094882	4.088189	3.996063	Normal	2	2	4
2025-08-05	2.531496	4.055906	6.114173	Wet	3	1	3
Result							Normal Conditions - 13

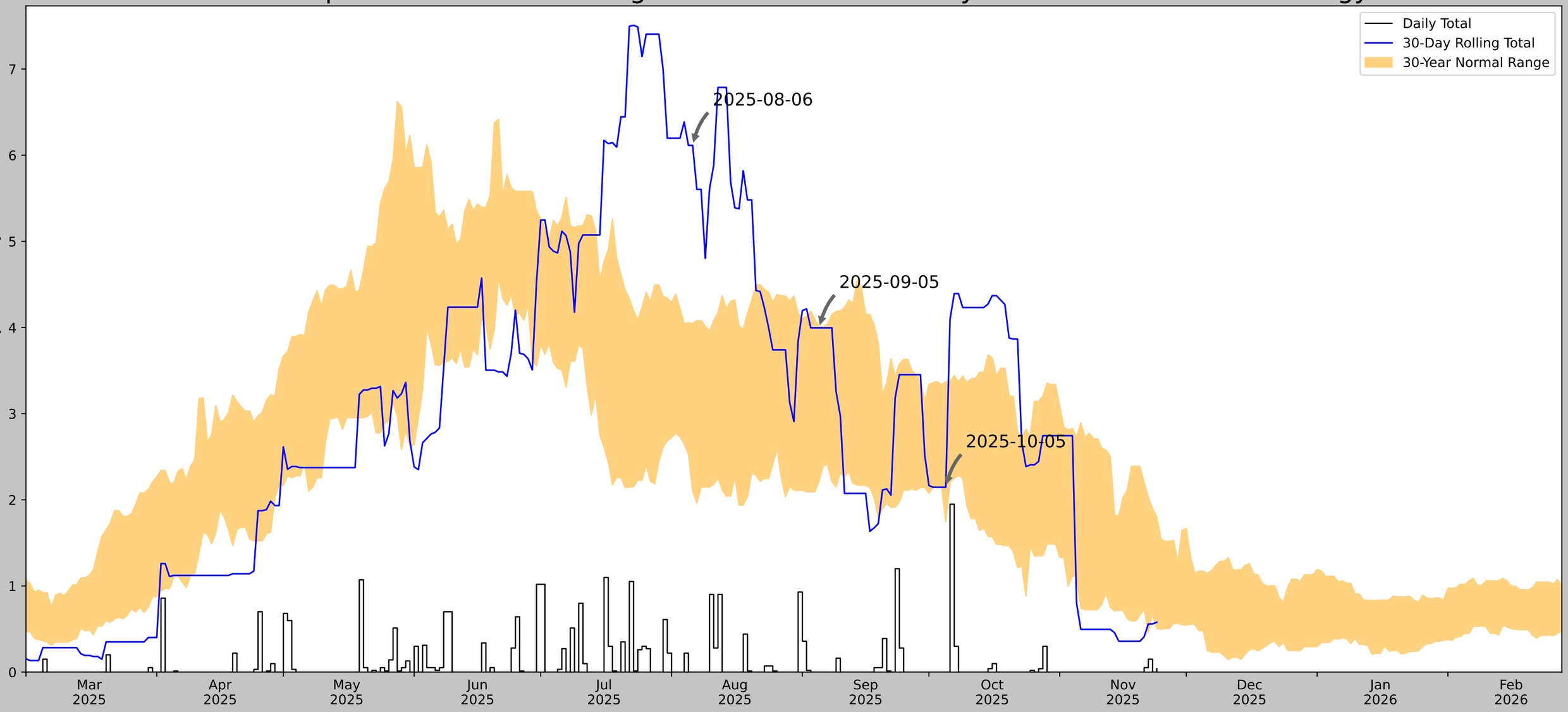
Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
BEATRICE 1N	40.2994, -96.75	1296.916	14.439	82.613	7.69	11306	81
BEATRICE 1.35 E	40.2704, -96.7228	1306.102	2.464	9.186	1.131	3	3
DEWITT 1.4 SE	40.377, -96.9086	1298.885	9.926	1.969	4.486	12	6
WYMORE	40.1269, -96.6711	1254.921	12.625	41.995	6.211	32	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.48622, -96.62704
Observation Date	2025-10-05
Elevation (ft)	1379.529
Drought Index (PDSI)	Moderate drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-10-05	1.748032	3.370866	2.145669	Normal	2	3	6
2025-09-05	2.224016	4.011024	3.996063	Normal	2	2	4
2025-08-06	2.098032	4.045276	6.114173	Wet	3	1	3
Result							Normal Conditions - 13

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
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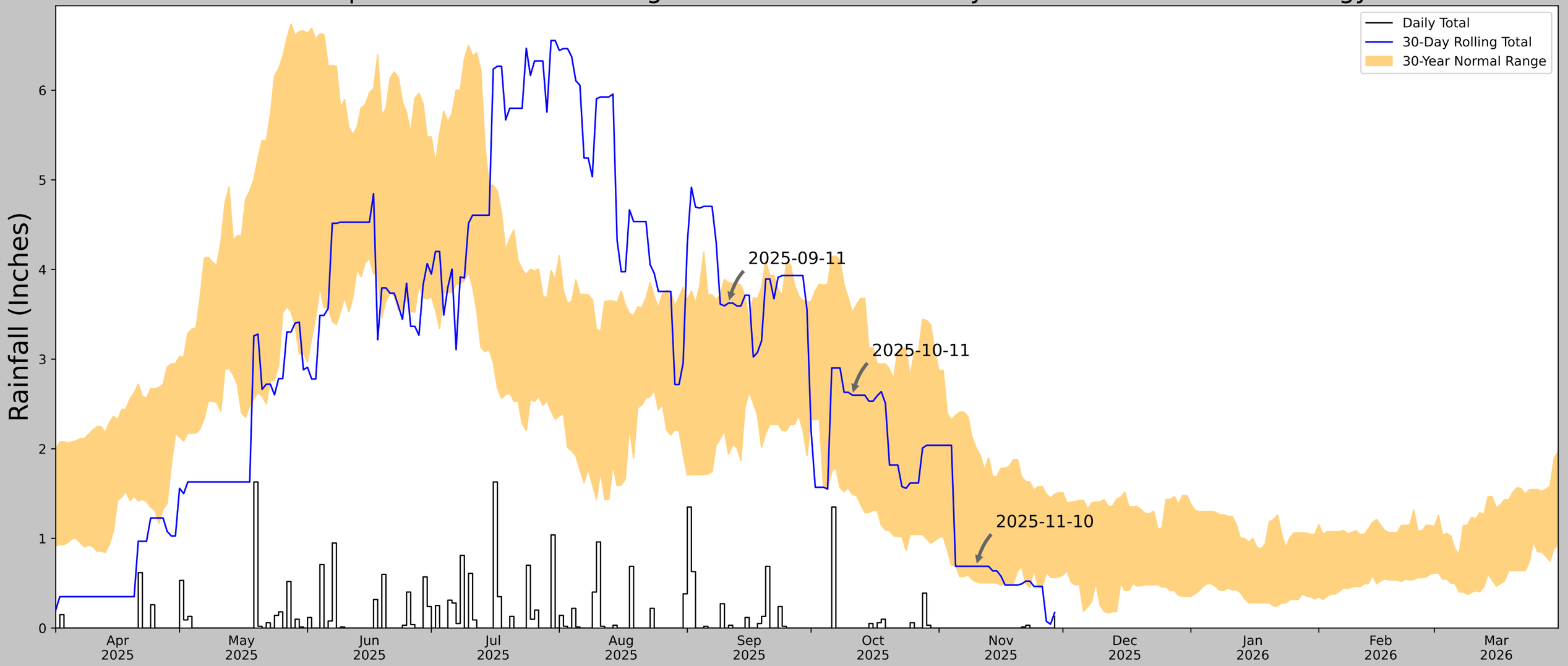
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
BEATRICE 1N	40.2994, -96.75	1296.916	14.439	82.613	7.69	11306	81
BEATRICE 1.35 E	40.2704, -96.7228	1306.102	2.464	9.186	1.131	3	3
DEWITT 1.4 SE	40.377, -96.9086	1298.885	9.926	1.969	4.486	12	6
WYMORE	40.1269, -96.6711	1254.921	12.625	41.995	6.211	32	0



Coordinates	40.56125, -96.76914
Observation Date	2025-11-10
Elevation (ft)	1387.061
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-10	0.516142	2.00748	0.688976	Normal	2	3	6
2025-10-11	1.489764	3.520866	2.598425	Normal	2	2	4
2025-09-11	1.936614	3.853937	3.625984	Normal	2	1	2
Result							Normal Conditions - 12

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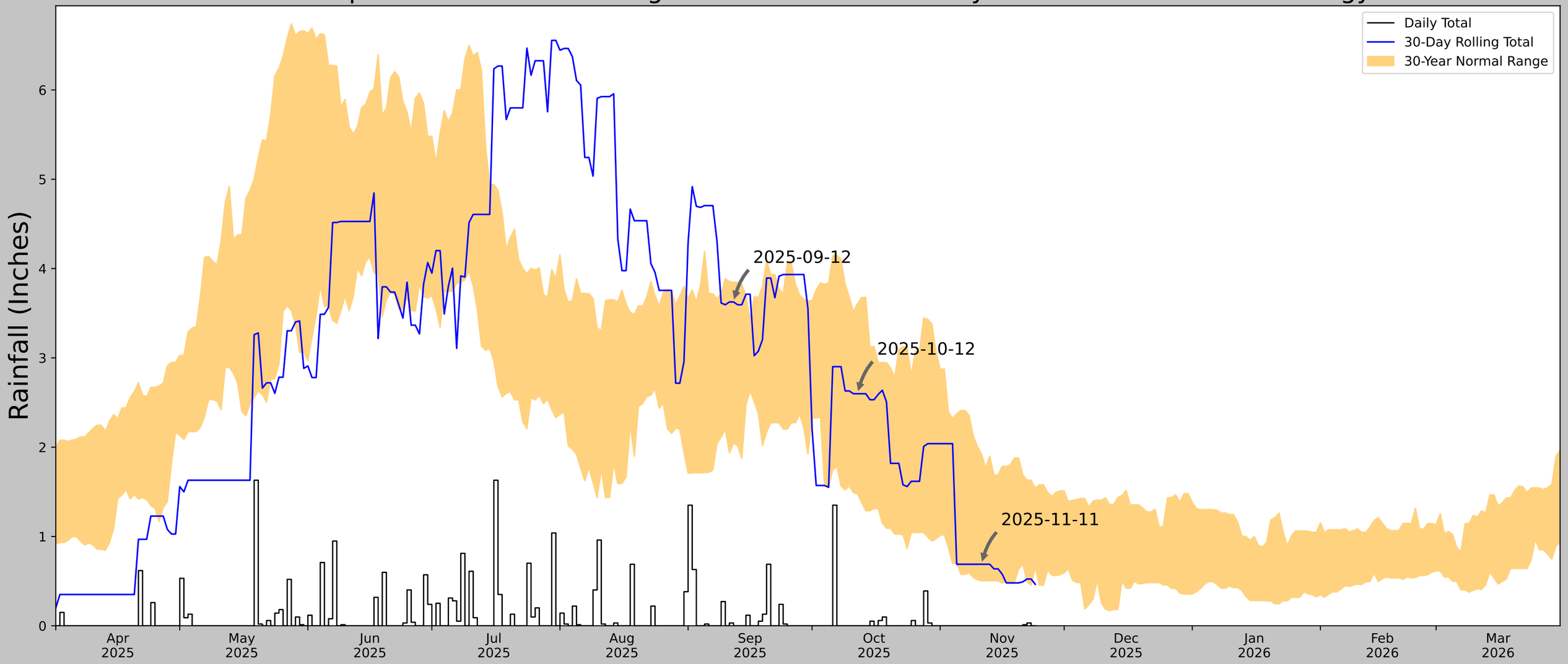
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	6.329	72.913	3.309	10783	90
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	0
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	0
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.56125, -96.76914
Observation Date	2025-11-11
Elevation (ft)	1386.79
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-11	0.503543	1.925984	0.688976	Normal	2	3	6
2025-10-12	1.477953	3.608268	2.598425	Normal	2	2	4
2025-09-12	2.045669	3.845669	3.625984	Normal	2	1	2
Result							Normal Conditions - 12

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Antecedent Precipitation Tool
Version 3.0

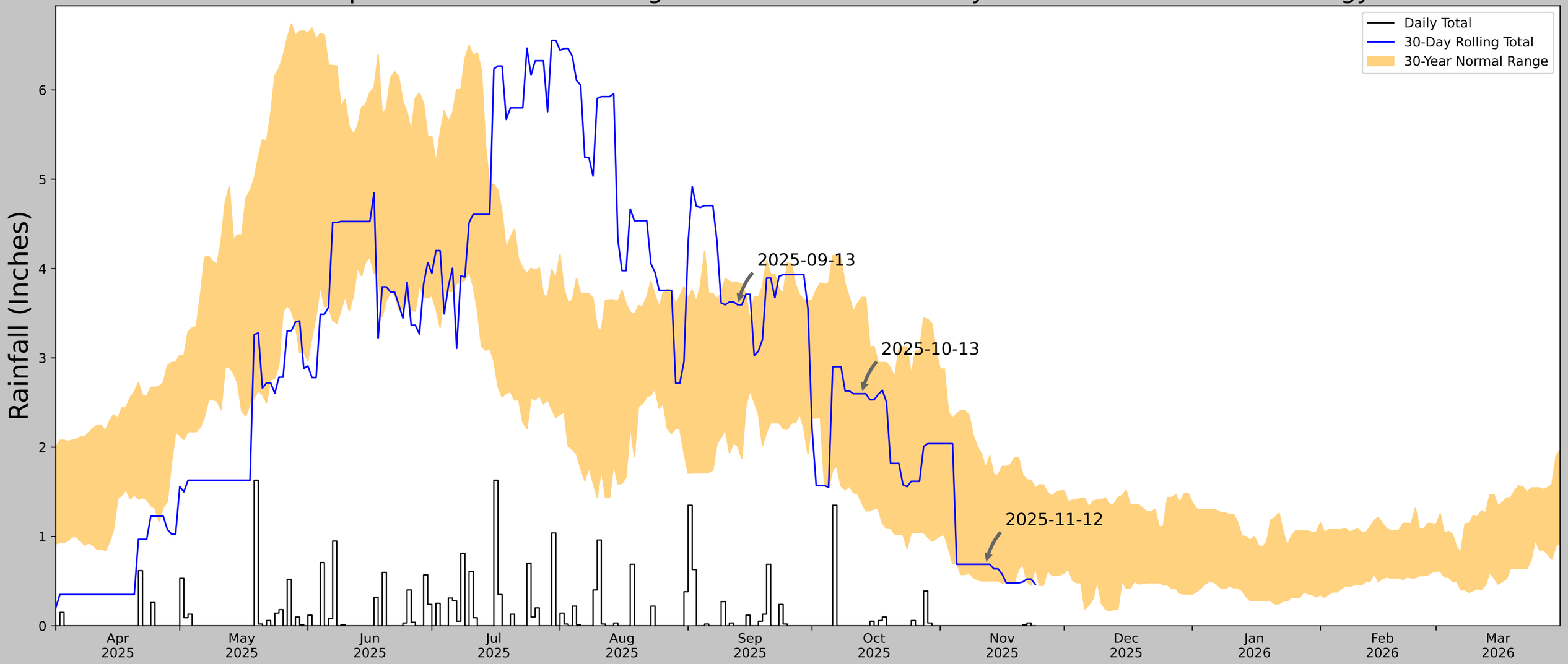
US Army Corps of Engineers

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	6.329	73.184	3.311	10782	89
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	0
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	0
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
MILFORD 5.9 SSE	40.6908, -97.0265	1383.858	9.873	76.116	5.194	1	1
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.56125, -96.76914
Observation Date	2025-11-12
Elevation (ft)	1386.79
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-12	0.503543	1.768504	0.688976	Normal	2	3	6
2025-10-13	1.37874	3.676772	2.598425	Normal	2	2	4
2025-09-13	2.01378	3.845669	3.594488	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the
Antecedent Precipitation Tool
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US Army Corps of Engineers

ERDC

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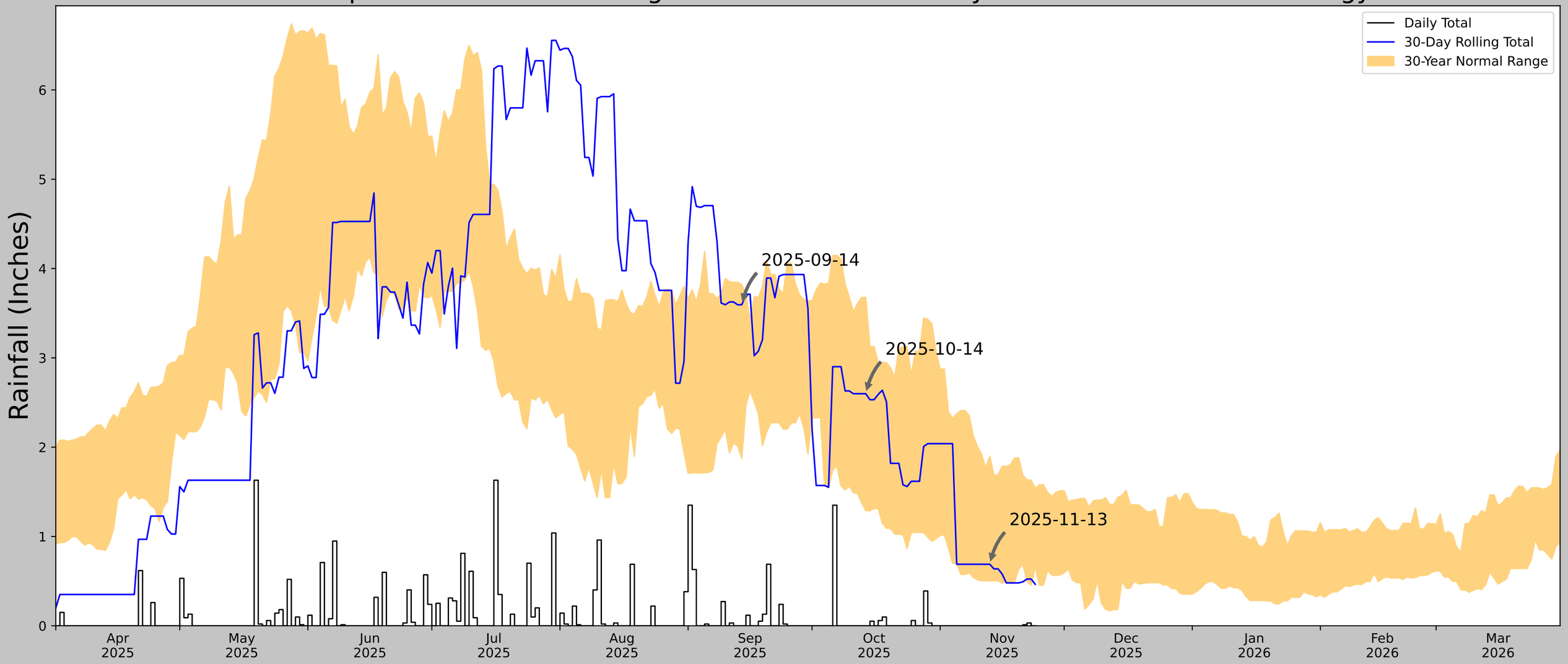
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	6.329	73.184	3.311	10782	89
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	0
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	0
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
MILFORD 5.9 SSE	40.6908, -97.0265	1383.858	9.873	76.116	5.194	1	1
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.56125, -96.76914
Observation Date	2025-11-13
Elevation (ft)	1386.79
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-13	0.503543	1.901181	0.688976	Normal	2	3	6
2025-10-14	1.288189	3.676772	2.598425	Normal	2	2	4
2025-09-14	1.873228	3.823622	3.594488	Normal	2	1	2
Result							Normal Conditions - 12

Figures and tables made by the
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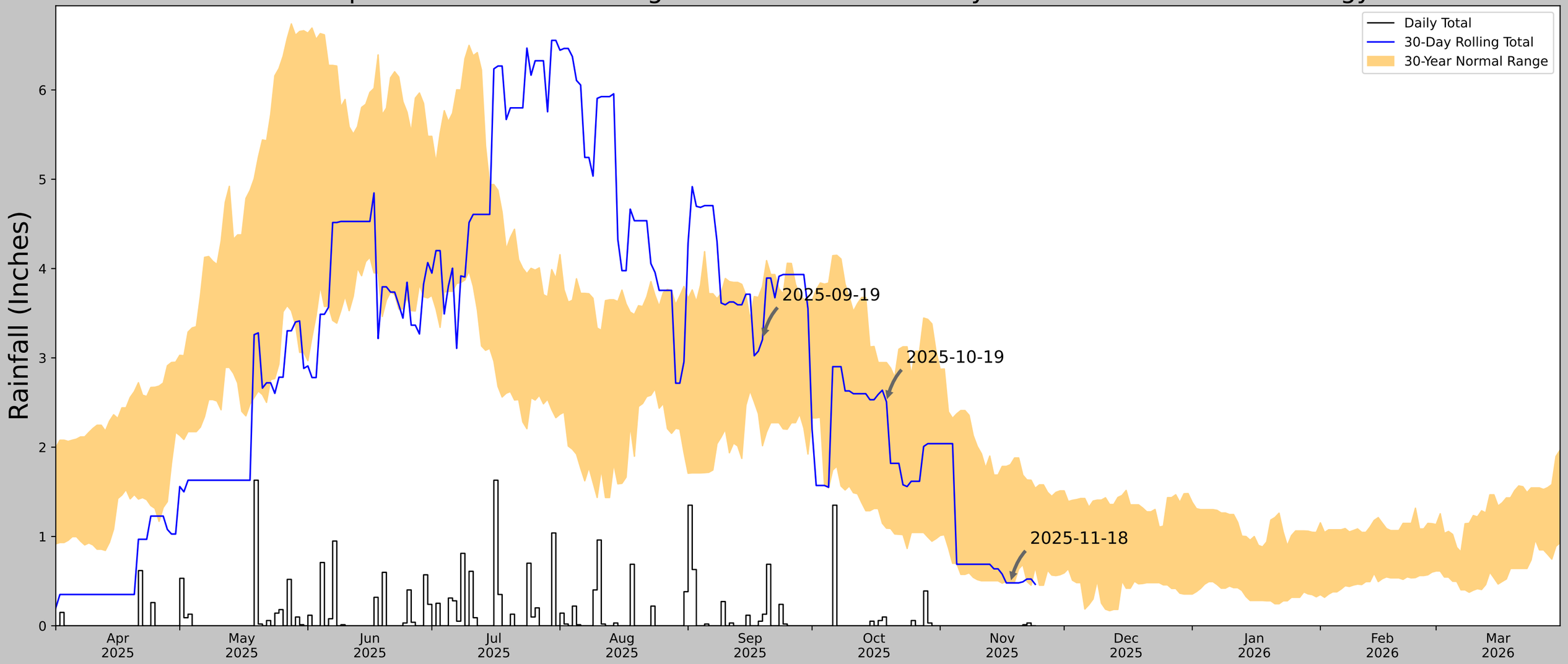
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	6.329	73.184	3.311	10782	89
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	0
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	0
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
MILFORD 5.9 SSE	40.6908, -97.0265	1383.858	9.873	76.116	5.194	1	1
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0



Coordinates	40.5574, -96.74181
Observation Date	2025-11-18
Elevation (ft)	1453.335
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-18	0.493701	1.804331	0.480315	Dry	1	3	3
2025-10-19	1.09252	2.948032	2.507874	Normal	2	2	4
2025-09-19	2.015748	3.798819	3.204725	Normal	2	1	2
Result							Drier than Normal - 9

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Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	7.708	6.639	3.52	10782	90
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	0
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	0
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
MILFORD 5.9 SSE	40.6908, -97.0265	1383.858	9.873	76.116	5.194	1	0
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network

Coordinates	40.5574, -96.74181
Observation Date	2025-12-16
Elevation (ft)	1453.335
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-12-16	0.420079	1.516535	0.38189	Dry	1	3	3
2025-11-16	0.477165	1.785039	0.57874	Normal	2	2	4
2025-10-17	1.312598	2.948032	2.590551	Normal	2	1	2
Result							Drier than Normal - 9

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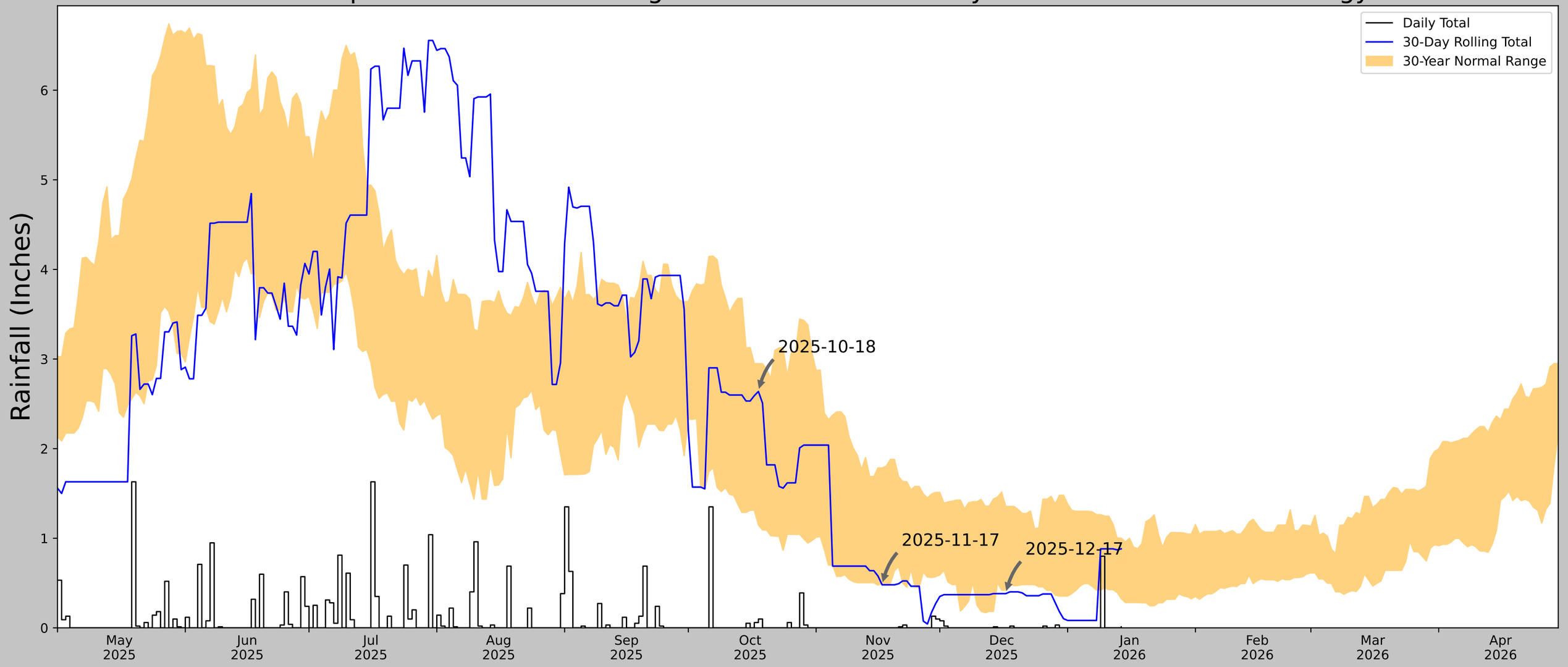
Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	7.708	6.639	3.52	10783	88
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	1
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	1
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.56875, -96.78183
Observation Date	2025-12-17
Elevation (ft)	1405.14
Drought Index (PDSI)	Incipient drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-12-17	0.420079	1.354724	0.38189	Dry	1	3	3
2025-11-17	0.496457	1.785039	0.480315	Dry	1	2	2
2025-10-18	1.148425	2.948032	2.637795	Normal	2	1	2
Result							Drier than Normal - 7

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
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Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
CRETE 4ESE	40.6092, -96.8719	1459.974	5.49	54.834	2.772	10783	88
CRETE 2.4 NE	40.6547, -96.9317	1420.932	4.44	39.042	2.171	51	0
HALLAM 2 N	40.5667, -96.7833	1450.131	5.499	9.843	2.529	20	0
HALLAM 0.2 NW	40.5393, -96.7885	1487.861	6.518	27.887	3.115	12	1
LINCOLN 11 SW	40.6953, -96.8542	1372.047	6.021	87.927	3.239	237	1
CRETE 4.0 N	40.6833, -96.953	1503.937	6.655	43.963	3.287	1	0
SPRAGUE	40.6333, -96.7333	1250.0	7.457	209.974	4.921	37	0
WILBER 6.9 E	40.4678, -96.829	1394.029	10.026	65.945	5.173	1	0
ROCA	40.6561, -96.6603	1240.158	11.559	219.816	7.742	211	0

Appendix C – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP07

Investigator(s): MS MB Section, Township, Range: S24, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.472301 Long: -96.589885 Datum: WGS84

Soil Map Unit Name: Malmo, eroded-Pawnee complex, 6 to 11 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a not-cropped area between soybean fields. Drainage features are present in not-cropped area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	15	Yes	FAC
2. *Gleditsia triacanthos*	15	Yes	FACU
3. *Juniperus virginiana*	10	Yes	FACU
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	60	Yes	FACU
2. *Setaria pumila*	20	Yes	FAC
3. *Panicum dichotomiflorum*	10	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	45	x 3 =	135
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	140 (A)		495 (B)
Prevalence Index = B/A =			3.54

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 3/2	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Point taken in a drainage way. Geomorphic position not applicable due to drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP08

Investigator(s): MS MB Section, Township, Range: S16, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.493107 Long: -96.640421 Datum: WGS84

Soil Map Unit Name: Judson silt loam, 2 to 6 percent slopes NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a ditched drainage way. Point taken in Shaw Creek no bed or bank is present.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	20	Yes	FAC
2.			
3.			
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	60	Yes	FACU
2. *Ambrosia trifida*	20	Yes	FAC
3. *Xanthium strumarium*	10	No	FAC
4. *Physalis longifolia*	10	No	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	60	x 4 =	240
UPL species	10	x 5 =	50
Column Totals:	120 (A)		440 (B)

Prevalence Index = B/A = 3.67

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay	
4-24	10YR 3/1	90	7.5YR 5/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable due to drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP09

Investigator(s): MS MB Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.50193 Long: -96.662052 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in an upland swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	40	Yes	FACU
2. *Setaria pumila*	30	Yes	FAC
3. *Solidago altissima*	20	No	FACU
4. *Trifolium pratense*	20	No	FACU
5. *Rosa multiflora*	5	No	FACU
6. *Andropogon gerardii*	5	No	FAC
7.			
8.			
9.			
10.			
	120	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	35	x 3 =	105
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	120 (A)		445 (B)

Prevalence Index = B/A = 3.71

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP09

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/1	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP10

Investigator(s): MS MB Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.500126 Long: -96.657455 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 2 to 6 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken along edge of soybean field and upland berm.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Morus alba*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	15	Yes	FAC
2. *Gleditsia triacanthos*	10	Yes	FACU
3.			
4.			
5.			
	25	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	20	Yes	FACU
2. *Amaranthus retroflexus*	15	Yes	FACU
3. *Setaria pumila*	10	No	FAC
4. *Gleditsia triacanthos*	10	No	FACU
5. *Sorghum bicolor*	5	No	UPL
6. *Cenchrus longispinus*	5	No	UPL
7. *Abutilon theophrasti*	5	No	FACU
8.			
9.			
10.			
	70	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	35	x 3 =	105
FACU species	60	x 4 =	240
UPL species	10	x 5 =	50
Column Totals:	105 (A)		395 (B)

Prevalence Index = B/A = 3.76

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Clay	
4-10	5Y 6/2	95	10YR 6/8	5	C		Clay	
10-24	5Y 6/2	90	10YR 6/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP11

Investigator(s): MS MB Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.497824 Long: -96.652604 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 2 to 6 percent slopes NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in an upland drainage way.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	10	Yes	FAC
2. *Morus alba*	10	Yes	FAC
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	30	Yes	FAC
2. *Phalaris arundinacea*	20	Yes	FACW
3. *Asclepias syriaca*	20	Yes	FACU
4. *Cannabis sativa*	20	Yes	UPL
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	50	x 3 =	150
FACU species	20	x 4 =	80
UPL species	20	x 5 =	100
Column Totals:	110 (A)		370 (B)
Prevalence Index = B/A =			3.36

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					Clay	
12-24	10YR 4/2	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable - drain tile present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/05/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP12

Investigator(s): MS MB Section, Township, Range: S15, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.484887 Long: -96.622474 Datum: WGS84

Soil Map Unit Name: Malmo, eroded-Pawnee complex, 6 to 11 percent slopes NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a upland swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	70	Yes	FACU
2. *Ambrosia artemisiifolia*	10	No	FACU
3. *Spartina pectinata*	10	No	FACW
4. *Persicaria maculosa*	5	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	95 (A)		350 (B)

Prevalence Index = B/A = 3.68

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	97	7.5YR 5/8	3	C	M	Clay	
20-24	10YR 3/1	90	7.5YR 5/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable - drain tile present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/05/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP13

Investigator(s): MS MB Section, Township, Range: S23, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 5-10 Lat: 40.474812 Long: -96.600378 Datum: WGS84

Soil Map Unit Name: Malmo, eroded-Pawnee complex, 6 to 11 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a upland drainage swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	15	Yes	FAC
2. *Morus alba*	10	Yes	FAC
3.			
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	10	Yes	FACU
2. *Maclura pomifera*	10	Yes	FACU
3.			
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	90	Yes	FACU
2. *Asclepias syriaca*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	145 (A)		555 (B)
Prevalence Index = B/A =			3.83

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/3	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/05/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP14

Investigator(s): MS MB Section, Township, Range: S23, T006N, R007E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.471487 Long: -96.591292 Datum: WGS84

Soil Map Unit Name: Malmo, eroded-Pawnee complex, 6 to 11 percent slopes NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a drainage swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	90	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	95 (A)		200 (B)

Prevalence Index = B/A = 2.11

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP14

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	100					Clay	
18-24	10YR 3/1	95	7.5YR 5/8	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP15

Investigator(s): JL CP Section, Township, Range: S18, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 40.567121 Long: -96.782488 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in an upland swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cornus racemosa*	10	Yes	FAC
2. *Gleditsia triacanthos*	5	Yes	FACU
3.			
4.			
5.			
	15	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	120 (A)		470 (B)
Prevalence Index = B/A =			3.92

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP15

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Silty Clay Loam	
8-24	10YR 3/3	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP22

Investigator(s): JL CP Section, Township, Range: S07, T006N, R007E

Landform (hillside, terrace, etc.): Talf Local relief (concave, convex, none): Linear

Slope (%): 0-1 Lat: 40.503556 Long: -96.667266 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn no volunteer vegetation. Vegetation assumed non-hydric based on lack of wetland hydrology.

SOIL

Sampling Point: PRB-SP22

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay Loam	
4-16	10YR 3/1	95	7.5YR 4/6	5	C	M	Clay Loam	
16-24	10YR 3/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP23

Investigator(s): JL CP Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.570304 Long: -96.753798 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in an assumed excavated depression. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	30	Yes	FACU
2. *Bromus japonicus*	20	Yes	FACU
3. *Setaria viridis*	10	No	UPL
4. *Thlaspi arvense*	10	No	FACU
5. *Phytolacca americana*	5	No	FACU
6. *Phalaris arundinacea*	5	No	FACW
7. *Amaranthus retroflexus*	5	No	FACU
8. *Helianthus annuus*	5	No	FACU
9. *Abutilon theophrasti*	2	No	FACU
10.			
	92	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	77	x 4 =	308
UPL species	10	x 5 =	50
Column Totals:	92 (A)		368 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP23

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/1	90	7.5YR 5/8	10	C	M	Silty Clay Loam	
16-24	10YR 3/1	75	5YR 3/4	25	C	M	Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP24

Investigator(s): CP JL Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 40.570056 Long: -96.751881 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Prunus americana*	25	Yes	UPL
2.			
3.			
4.			
5.			
	25	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	25	x 5 =	125
Column Totals:	125 (A)		525 (B)

Prevalence Index = B/A = 4.2

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP24

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 4/2	100					Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP25

Investigator(s): JL CP Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.569647 Long: -96.749236 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a swale. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Gleditsia triacanthos*	10	Yes	FACU
2. *Prunus americana*	10	Yes	UPL
3.			
4.			
5.			
	20	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	10	x 5 =	50
Column Totals:	120 (A)		290 (B)
Prevalence Index = B/A =			2.42

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	100					Clay Loam	
10-18	10YR 3/1	98	5YR 3/4	2	C	M	Clay Loam	
18-24	10YR 3/1	95	5YR 3/4	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP26

Investigator(s): CP, JL Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-4 Lat: 40.569782 Long: -96.7471 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification: PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	30	Yes	FACU
2. *Ulmus pumila*	30	Yes	UPL
3. *Morus alba*	10	No	FAC
4. *Juniperus virginiana*	5	No	FACU
5.			
	75	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Prunus americana*	5	Yes	UPL
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 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	10	x 3 =	30
FACU species	135	x 4 =	540
UPL species	35	x 5 =	175
Column Totals:	180 (A)		745 (B)

Prevalence Index = B/A = 4.14

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP26

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 4/2	100					Sandy Clay Loam	Refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:
Refusal at 14 inches due to tough compaction.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:
Geomorphic position not applicable. Slight dip is an assumed to be created by animal/pasture trail.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP27

Investigator(s): JL CP Section, Township, Range: S15, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.569944 Long: -96.741878 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 4 to 8 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field at a drain tile inlet. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Corn not planted directly around drain tile. Corn stalks remaining after harvest do not appear to be stunted or stressed.

SOIL

Sampling Point: PRB-SP27

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					Loam	
12-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable due to drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP28

Investigator(s): CP, JL Section, Township, Range: S15, T007N, R006E

Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 0-3 Lat: 40.569436 Long: -96.741982 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 4 to 8 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested cornfield adjacent to drain tile inlet. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn with no volunteer vegetation. Vegetation assumed non-hydric based on a lack of wetland hydrology and hydric soils.

SOIL

Sampling Point: PRB-SP28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					Silty Clay Loam	
8-16	10YR 3/1	100					Silty Clay Loam	
16-24	10YR 3/2	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP29

Investigator(s): JL CP Section, Township, Range: S15, T007N, R006E

Landform (hillside, terrace, etc.): Summit Local relief (concave, convex, none): Convex

Slope (%): 12-15 Lat: 40.568461 Long: -96.741811 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field at the top of a hill. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn no volunteer vegetation present. Vegetation assumed non-hydric based on lack of evidence of stunted/stressed corn and a lack of wetland hydrology and hydric soils.

SOIL

Sampling Point: PRB-SP29

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	100					Clay Loam	
12-18	10YR 3/2	100					Clay Loam	
18-24	10YR 4/3	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP30

Investigator(s): JL CP Section, Township, Range: S22, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.562961 Long: -96.741927 Datum: WGS84

Soil Map Unit Name: Mayberry silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a linear dip that leads to a drain tile outlet in a harvested corn field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn. No evidence of crop stress or stunting in remaining harvested stalks. No volunteer vegetation. Vegetation assumed non-hydric.

SOIL

Sampling Point: PRB-SP30

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Loam	
6-16	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	
16-24	10YR 4/1	95	7.5YR 4/6	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP31

Investigator(s): CP,JL Section, Township, Range: S22, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 40.560766 Long: -96.742046 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested cornfield drainage way that leads to a drain tile outlet in the adjacent roadside ROW. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested corn. Remaining corn stalks after harvest lack evidence of crop stress/stunting.

SOIL

Sampling Point: PRB-SP31

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					Clay Loam	
8-18	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	
18-24	10YR 3/1	95	7.5YR 4/6	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable due to drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP32

Investigator(s): JL CP Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 40.541594 Long: -96.740026 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 6 to 11 percent slopes NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field. No open water feature present. Point taken along ephemeral waterway that leads to additional waterway. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested soybean. Vegetation assumed non-hydric based on a lack of wetland hydrology and evidence of crop stress.

SOIL

Sampling Point: PRB-SP32

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/1	100					Clay Loam	
3-16	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	
16-24	10YR 4/1	90	7.5YR 4/6	10	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 18

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable due to drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/10/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP33

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 2-3 Lat: 40.567429 Long: -96.769009 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a wooded area along a slope towards a waterway.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	30	Yes	FAC
2.			
3.			
4.			
5.			
	30	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Celtis occidentalis*	35	Yes	FAC
2. *Juniperus virginiana*	15	Yes	FACU
3.			
4.			
5.			
	50	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Elymus virginicus*	65	Yes	FACW
2. *Smilax hispida*	8	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	73	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	65	x 2 =	130
FAC species	73	x 3 =	219
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	153 (A)		409 (B)
Prevalence Index = B/A =			2.67

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP33

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/3	100					Sandy Clay Loam	
8-14	10YR 3/2	99	7.5YR 4/6	1	C	M	Sandy Clay Loam	
14-24	10YR 3/2	98	7.5YR 4/6	2	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): _____

Water Table Present? Yes ____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): _____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/10/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP34

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.571083 Long: -96.769295 Datum: WGS84

Soil Map Unit Name: Burchard-Nodaway complex, 2 to 30 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	50	Yes	FACU
2. *Celtis occidentalis*	25	Yes	FAC
3. *Morus alba*	15	No	FAC
4.			
5.			
	90	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Celtis occidentalis*	25	Yes	FAC
2.			
3.			
4.			
5.			
	25	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Ageratina altissima*	35	Yes	FACU
2. *Chenopodium simplex*	20	Yes	UPL
3. *Elymus virginicus*	15	No	FACW
4. *Conium maculatum*	5	No	FACW
5. *Smilax hispida*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	70	x 3 =	210
FACU species	85	x 4 =	340
UPL species	20	x 5 =	100
Column Totals:	195 (A)		690 (B)
Prevalence Index = B/A =			3.54

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP34

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100					Sandy Clay Loam	
6-18	10YR 3/3	99	7.5YR 4/6	1	C	M	Sandy Clay Loam	
18-24	10YR 4/2	95	7.5YR 4/6	5	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP35

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 5 Lat: 40.570275 Long: -96.779198 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken along farm field edge.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus pumila*	15	Yes	UPL
2.			
3.			
4.			
5.			
	15 =Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	90	Yes	FACU
2. *Setaria faberi*	5	No	FACU
3. *Abutilon theophrasti*	2	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	97 =Total Cover		
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

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 (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	97	x 4 =	388
UPL species	15	x 5 =	75
Column Totals:	112 (A)		463 (B)

Prevalence Index = B/A = 4.13

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP35

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					Sandy Clay Loam	
12-24	10YR 3/2	99	7.5YR 4/6	1	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP36

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 4-5 Lat: 40.570308 Long: -96.765707 Datum: WGS84

Soil Map Unit Name: Kennebec silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a wooded area above the waterway top of bank.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	15	Yes	FAC
2.			
3.			
4.			
5.			
	15 =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Ulmus pumila*	15	Yes	UPL
2. *Gleditsia triacanthos*	15	Yes	FACU
3. ~~*Juniperus virginiana*~~	~~5~~	~~Yes~~	~~FACU~~
4.			
5.			
	35 =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	95	Yes	FACU
2. *Gleditsia triacanthos*	5	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	120	x 4 =	480
UPL species	15	x 5 =	75
Column Totals:	150 (A)		600 (B)
Prevalence Index = B/A =			4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP36

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100					Sandy Clay Loam	
8-24	10YR 4/2	99	7.5YR 4/6	1	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:
Present redox is not distinct or prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP43

Investigator(s): CP, JL Section, Township, Range: S18, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.570264 Long: -96.78161 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in an upland swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Gleditsia triacanthos*	35	Yes	FACU
2.			
3.			
4.			
5.			
	35	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	135	x 4 =	540
UPL species	0	x 5 =	0
Column Totals:	135 (A)		540 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/3	99	7.5YR 4/6	1	C	M	Silty Clay Loam	Refusal

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:
Refusal at 18 inches due to heavy compaction.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP44

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.569668 Long: -96.780011 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in mowed ROW. No waterway or wetland present.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	80	Yes	FACU
2. *Setaria pumila*	20	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___2 cm Muck (A10)
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Iron Monosulfide (A18)
___Sandy Mucky Mineral (S1)
___5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

____ Iron-Manganese Masses (F12)
___Red Parent Material (F21)
___Very Shallow Dark Surface (F22)
___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

No soil pit taken due to the possibility of buried utilities. Soils assumed non hydric based on NRCS mapped rating and lack of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
X Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP45

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 20 Lat: 40.567568 Long: -96.779777 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway silty clay loams, frequently flooded NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken on the top of a berm.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP45

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

No soil pit taken due to possibility of buried utilities. Soils assumed non-hydric based on a lack of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP46

Investigator(s): JL CP Section, Township, Range: S18, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 4-6 Lat: 40.567765 Long: -96.780463 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway silty clay loams, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken above waterway top of bank in a slightly wooded area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	25	Yes	FAC
2.			
3.			
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Celtis occidentalis*	15	Yes	FAC
2. *Prunus virginiana*	15	Yes	FACU
3.			
4.			
5.			
	30	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	115	x 4 =	460
UPL species	0	x 5 =	0
Column Totals:	155 (A)		580 (B)
Prevalence Index = B/A =			3.74

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP46

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/1	99	7.5YR 4/6	1	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:
Redox presence is not distinct and prominent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP47

Investigator(s): RS Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.546673 Long: -96.740624 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a harvested soybean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No vegetation, harvested bean field.

SOIL

Sampling Point: PRB-SP47

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of volunteer hydrophytic vegetation and sampled area is mapped as predominantly non-hydric soils by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Field is drain tiled geomorphic position not applicable.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP48

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.567385 Long: -96.743205 Datum: WGS84

Soil Map Unit Name: Mayberry silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	95	Yes	FACU
2. *Symphyotrichum ericoides*	5	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP48

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a mapped rating of non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP49

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.569376 Long: -96.74489 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Fraxinus pennsylvanica*	10	Yes	FACW
2. *Salix amygdaloides*	5	Yes	FACW
3.			
4.			
5.			
	15	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Maclura pomifera*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	125 (A)		470 (B)

Prevalence Index = B/A = 3.76

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP49

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a mapped soil rating of non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP50

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 40.571246 Long: -96.745019 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	30	Yes	FACU
2.			
3.			
4.			
5.			
	30	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	55	Yes	FACU
2. *Andropogon gerardii*	30	Yes	FAC
3. *Sorghastrum nutans*	15	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	30	x 3 =	90
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	130 (A)		490 (B)

Prevalence Index = B/A = 3.77

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP50

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric due to landscape position and 100% UPL and FACU vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP51

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 40.571139 Long: -96.747806 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	15	Yes	FACU
2. *Salix amygdaloides*	5	Yes	FACW
3.			
4.			
5.			
	20	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	35	Yes	FACU
2.			
3.			
4.			
5.			
	35	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	150	x 4 =	600
UPL species	0	x 5 =	0
Column Totals:	155 (A)		610 (B)
Prevalence Index = B/A =			3.94

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP51

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a mapped soil rating of predominantly non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP52

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.571067 Long: -96.766105 Datum: WGS84

Soil Map Unit Name: Kennebec silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Trees within OHWM of stream were not included for purposes of this data form.

SOIL

Sampling Point: PRB-SP52

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils presumed non-hydric based on 100% FACU vegetation and FACW trees confined to OHWM of nearby stream.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP53

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.571654 Long: -96.780296 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Road ditch. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP53

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___2 cm Muck (A10)
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Iron Monosulfide (A18)
___Sandy Mucky Mineral (S1)
___5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

____ Iron-Manganese Masses (F12)
___Red Parent Material (F21)
___Very Shallow Dark Surface (F22)
___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a mapped soil rating of predominantly non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
X Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP54

Investigator(s): RS Section, Township, Range: S18, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 0 Lat: 40.571668 Long: -96.780462 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Harvested bean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No vegetation, harvested bean field

SOIL

Sampling Point: PRB-SP54

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on landscape position and 100% upland cropping

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP55

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.571525 Long: -96.766249 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Robinia pseudoacacia*	25	Yes	FACU
2.			
3.			
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	125	x 4 =	500
UPL species	0	x 5 =	0
Column Totals:	125 (A)		500 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP55

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on 100% UPL and FACU species

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP56

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.570604 Long: -96.766057 Datum: WGS84

Soil Map Unit Name: Kennebec silt loam, occasionally flooded NWI classification: PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	110 (A)		430 (B)

Prevalence Index = B/A = 3.91

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP56

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on 100% UPL and FACU vegetation

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP57

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.567101 Long: -96.772946 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	105 (A)		415 (B)

Prevalence Index = B/A = 3.95

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP57

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___2 cm Muck (A10)
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Iron Monosulfide (A18)
___Sandy Mucky Mineral (S1)
___5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

____ Iron-Manganese Masses (F12)
___Red Parent Material (F21)
___Very Shallow Dark Surface (F22)
___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on 100% UPL and FACU vegetation

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes ____ No X Depth (inches): ____

Saturation Present? (includes capillary fringe) Yes ____ No X Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP58

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 1 Lat: 40.568142 Long: -96.77969 Datum: WGS84

Soil Map Unit Name: Pawnee clay loam, 6 to 11 percent slopes, eroded NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP58

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on 100% FACU vegetation

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP59

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.570206 Long: -96.779189 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditons are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus pumila*	10	Yes	UPL
2.			
3.			
4.			
5.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	15	Yes	FAC
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	100	x 4 =	400
UPL species	10	x 5 =	50
Column Totals:	125 (A)		495 (B)
Prevalence Index = B/A =			3.96

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP59

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on 100% UPL and FACU vegetation

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-SP60

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.571684 Long: -96.77926 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	20	Yes	FAC
2.			
3.			
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	125 (A)		475 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-SP60

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down, Soils conservatively assumed hydric based on a presence of hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W09-1u

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex

Slope (%): 1-5 Lat: 40.516912 Long: -96.707467 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 2 to 6 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken on edge of a cornfield.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Ulmus pumila*	30	Yes	UPL
2.			
3.			
4.			
5.			
	30	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	15	Yes	FAC
2. *Solidago altissima*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	5	x 4 =	20
UPL species	30	x 5 =	150
Column Totals:	50 (A)		215 (B)
Prevalence Index = B/A =			4.3

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Healthy corn present.

SOIL

Sampling Point: PRB-W09-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/2	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W09-1w

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.516959 Long: -96.707365 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow between roadway and cornfield.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	30	Yes	OBL
2. *Populus deltoides*	10	Yes	FAC
3.			
4.			
5.			
	40	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	95	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	95	x 2 =	190
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	135 (A)		250 (B)

Prevalence Index = B/A = 1.85

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W09-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay	
4-10	10YR 3/1	95	7.5YR 5/8	5	C	M	Clay	
10-24	10YR 3/1	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W09-2u

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Shoulder Local relief (concave, convex, none): Convex

Slope (%): 1-5 Lat: 40.515656 Long: -96.708135 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken on edge of soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Abutilon theophrasti*	20	Yes	FACU
2. *Phalaris arundinacea*	20	Yes	FACW
3. *Hibiscus trionum*	10	Yes	UPL
4. *Setaria pumila*	10	Yes	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	60	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	20	x 4 =	80
UPL species	10	x 5 =	50
Column Totals:	60 (A)		200 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W09-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Clay	
6-24	10YR 3/1	95	7.5YR 5/8	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W09-2w

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.515711 Long: -96.708177 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wetland drainage swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	90	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		180 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W09-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/1	90	7.5YR 5/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W10-1u

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Linear

Slope (%): 5-10 Lat: 40.514553 Long: -96.704593 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a grassland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	60	Yes	FACU
2. *Physalis longifolia*	10	No	UPL
3. *Solidago altissima*	10	No	FACU
4. *Spartina pectinata*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	70	x 4 =	280
UPL species	10	x 5 =	50
Column Totals:	90 (A)		350 (B)

Prevalence Index = B/A = 3.89

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W10-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/2	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W10-1w

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.514636 Long: -96.70458 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	70	Yes	FACW
2. *Spartina pectinata*	20	Yes	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		180 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W10-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay	
4-24	10YR 3/1	95	10YR 5/8	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W10-2u

Investigator(s): JL CP Section, Township, Range: S01, T006N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 4-5 Lat: 40.513333 Long: -96.702625 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field. Field is drain tiled.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn. No volunteer vegetation. Harvested corn remnants matches the density of the rest of the field, no evidence of crop stress.

SOIL

Sampling Point: PRB-W10-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Loam	
6-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W10-2w

Investigator(s): JL CP Section, Township, Range: S01, T006N, R006E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.513374 Long: -96.702529 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in wetland drainage swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Schoenoplectus fluviatilis*	15	No	OBL
3. *Setaria viridis*	5	No	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	60	x 2 =	120
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	5	x 5 =	25
Column Totals:	80 (A)		160 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W10-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay Loam	Muck
4-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	Muck

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes X	No ___	Depth (inches): 4
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W11-1u

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Linear

Slope (%): 5-10 Lat: 40.513713 Long: -96.704736 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a upland grassland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	80	Yes	FACU
2. *Helianthus maximiliani*	10	No	UPL
3. *Cichorium intybus*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	90	x 4 =	360
UPL species	10	x 5 =	50
Column Totals:	100 (A)		410 (B)

Prevalence Index = B/A = 4.1

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W11-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/2	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/03/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W11-1w

Investigator(s): MS MB Section, Township, Range: S02, T006N, R006E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.513648 Long: -96.704716 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	90	Yes	FACW
2. *Helianthus maximiliani*	5	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	5	x 5 =	25
Column Totals:	95 (A)		205 (B)

Prevalence Index = B/A = 2.16

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W11-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay	
4-24	10YR 3/1	95	7.5YR 5/8	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W12-1u

Investigator(s): MS, MB Section, Township, Range: S16, T006N, R007E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.488212 Long: -96.632704 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a swale at the edge of a soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	60	Yes	FACU
2. *Ambrosia trifida*	15	No	FAC
3. *Setaria pumila*	10	No	FAC
4. *Asclepias syriaca*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	100 (A)		375 (B)
Prevalence Index = B/A =			3.75

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W12-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					Clay	
12-24	10YR 3/1	90	7.5YR 5/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W12-1w

Investigator(s): MS MB Section, Township, Range: S16, T006N, R007E

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.488239 Long: -96.632774 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow in a ditched drainage way. Revenant bed and bank present but bottom is vegetated.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	20	Yes	FACW
2. *Ambrosia trifida*	20	Yes	FAC
3. *Persicaria maculosa*	10	No	FACW
4. *Symphyotrichum lanceolatum*	10	No	FAC
5. *Echinochloa crusgalli*	5	No	FACW
6. *Setaria pumila*	5	No	FAC
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	40	x 3 =	120
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		190 (B)

Prevalence Index = B/A = 2.53

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W12-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/1	90	7.5YR 5/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W13-1u

Investigator(s): MS MB Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Linear

Slope (%): 5-10 Lat: 40.504002 Long: -96.666825 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken on edge of a cornfield.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	20	Yes	FAC
2. *Asclepias syriaca*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	30 (A)		100 (B)

Prevalence Index = B/A = 3.33

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
Healthy corn present.

SOIL

Sampling Point: PRB-W13-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/2	95	10YR 5/8	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W13-1w

Investigator(s): MS MP Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.50401 Long: -96.666901 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow in a drainage ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	20	Yes	OBL
2.			
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	80	Yes	FACW
2. *Asclepias syriaca*	10	No	FACU
3. *Helianthus maximiliani*	10	No	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	10	x 5 =	50
Column Totals:	120 (A)		270 (B)

Prevalence Index = B/A = 2.25

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W13-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay	
4-24	10YR 3/1	95	10YR 5/8	5	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W14-1u

Investigator(s): CP, JL Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 40.546836 Long: -96.741449 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested soybeans. No evidence of soybean crop stress in harvest remnants.

SOIL

Sampling Point: PRB-W14-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	95	10YR 4/6	5	C	M	Clay Loam	
8-24	10YR 3/2	93	7.5YR 5/8	7	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W14-1w

Investigator(s): JL CP Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.546662 Long: -96.741466 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 3 to 6 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Panicum capillare*	20	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	20 (A)		60 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean.

SOIL

Sampling Point: PRB-W14-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay Loam	
4-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Field is drain tiled geomorphic position not applicable.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W15-1u

Investigator(s): MS MB Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 1-5 Lat: 40.500524 Long: -96.659152 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a drainage swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Gleditsia triacanthos*	10	Yes	FACU
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	80	Yes	FACU
2. *Rosa multiflora*	10	No	FACU
3. *Helianthus maximilianii*	10	No	UPL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	10	x 5 =	50
Column Totals:	110 (A)		450 (B)

Prevalence Index = B/A = 4.09

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W15-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/2	100					Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 10/04/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W15-1w

Investigator(s): MS MB Section, Township, Range: S08, T006N, R007E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.500479 Long: -96.659086 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification: PEM1A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow in a drainage swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	80	Yes	FACW
2. *Helianthus maximiliani*	10	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	10	x 5 =	50
Column Totals:	90 (A)		210 (B)

Prevalence Index = B/A = 2.33

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W15-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	90	7.5YR 5/8	10	C	M	Clay	
10-24	10YR 4/1	90	7.5YR 5/8	10	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W16-1u

Investigator(s): JL CP Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 40.544012 Long: -96.741675 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Climate conditions are drier than normal. Point taken in a wooded area with fallen debris.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Maclura pomifera*	15	Yes	FACU
2.			
3.			
4.			
5.			
	15	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Morus alba*	10	Yes	FAC
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Sicyos angulatus*	30	Yes	FACW
2. *Phalaris arundinacea*	15	Yes	FACW
3. *Ambrosia trifida*	15	Yes	FAC
4. *Conium maculatum*	10	No	FACW
5. *Geum canadense*	5	No	FAC
6.			
7.			
8.			
9.			
10.			
	75	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	30	x 3 =	90
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	100 (A)		260 (B)

Prevalence Index = B/A = 2.6

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W16-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/1	100					Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W16-1w

Investigator(s): CP JL Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 40.543633 Long: -96.741583 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Maclura pomifera*	20	Yes	FACU
2.			
3.			
4.			
5.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Sambucus canadensis*	10	Yes	FACW
2.			
3.			
4.			
5.			
	10	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	45	Yes	FACW
2. *Bromus inermis*	20	Yes	FACU
3. *Elymus virginicus*	10	No	FACW
4. *Ambrosia trifida*	10	No	FAC
5. *Sicyos angulatus*	10	No	FACW
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	75	x 2 =	150
FAC species	10	x 3 =	30
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	125 (A)		340 (B)
Prevalence Index = B/A =			2.72

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W16-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					Clay Loam	
8-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W17-1u

Investigator(s): CP JL Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Concave

Slope (%): 1-3 Lat: 40.542193 Long: -96.740444 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 6 to 11 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested soybean. No evidence of crop stress in the soybean remnants from harvest.

SOIL

Sampling Point: PRB-W17-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 3/1	100					Clay Loam	
18-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W17-1w

Investigator(s): JL CP Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.542209 Long: -96.740604 Datum: WGS84

Soil Map Unit Name: Wymore silty clay loam, 6 to 11 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field. No soybean grew in wetland. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Amaranthus tuberculatus*	5	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	5	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	5 (A)		5 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Soybean did not grow in wetland area.

SOIL

Sampling Point: PRB-W17-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	95	7.5YR 5/8	5	C	M	Clay Loam	
12-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- X Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Field drain tiled - Geomorphic position is not applicable.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W18-1u

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 3-4 Lat: 40.571541 Long: -96.772505 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Gleditsia triacanthos*	15	Yes	FACU
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	90	Yes	FACU
2. *Urtica dioica*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	115 (A)		440 (B)
Prevalence Index = B/A =			3.83

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W18-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/2	100					Sandy Clay Loam	
12-24	10YR 4/2	98	7.5YR 4/6	2	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/11/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W18-1w

Investigator(s): JL CP Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.571532 Long: -96.772558 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	15	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	15 (A)		30 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W18-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 4/2	95	7.5YR 4/6	5	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W28-1u

Investigator(s): JL CP Section, Township, Range: S01, T006N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 3-4 Lat: 40.512099 Long: -96.689668 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification: PEM1Ch

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field. Field is drain tiled.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn. Assumed non hydric based on a lack of wetland hydrology and evidence of crop stress.

SOIL

Sampling Point: PRB-W28-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay Loam	
4-24	10YR 3/1	95	7.5YR 4/6	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W28-1w

Investigator(s): JL CP Section, Township, Range: S01, T006N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.511859 Long: -96.689626 Datum: WGS84

Soil Map Unit Name: Otoe silty clay loam, 6 to 11 percent slopes, eroded NWI classification: PEM1Ch

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?**	**Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____		
Wetland Hydrology Present?	Yes X	No ____		

Remarks:
Point taken in harvested corn field. Field is drain tiled.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phragmites australis*	30	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	30 (A)		60 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn. Evidence of crop stress in remaining corn stalks.

SOIL

Sampling Point: PRB-W28-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay Loam	
4-18	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	
18-24	10YR 3/1	85	7.5YR 4/6	15	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Field is drain tiled - geomorphic position not applicable.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W29-1u

Investigator(s): CP, JL Section, Township, Range: S01, T006N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Convex

Slope (%): 0-2 Lat: 40.513788 Long: -96.697893 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested cornfield

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested corn. Corn stalk remnants do not have evidence of crop stress.

SOIL

Sampling Point: PRB-W29-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	98	7.5YR 3/4	2	C	M	Clay Loam	
10-24	10YR 3/1	95	7.5YR 3/4	5	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Gage County Sampling Date: 11/13/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W29-1w

Investigator(s): JL CP Section, Township, Range: S01, T006N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.51374 Long: -96.697741 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a deep swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Typha x glauca*	60	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	60	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	60 (A)		60 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W29-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	Muck

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 6
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W30-1u

Investigator(s): JL CP Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 3 Lat: 40.570227 Long: -96.748582 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken at the edge of the assumed excavated area at the bottom of a berm. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Conyza canadensis*	20	Yes	FACU
2. *Erechtites hieracifolius*	20	Yes	UPL
3. *Helianthus annuus*	10	No	FACU
4. *Ambrosia artemisiifolia*	10	No	FACU
5. *Phalaris arundinacea*	5	No	FACW
6.			
7.			
8.			
9.			
10.			
	65	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	20	x 5 =	100
Column Totals:	65 (A)		270 (B)

Prevalence Index = B/A = 4.15

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W30-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	100					Loam	
2-12	10YR 3/1	90	5YR 4/6	10	C	M		
12-24	10YR 3/1	80	5YR 4/6	20	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W30-1w

Investigator(s): CP JL Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.570137 Long: -96.748442 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?**	**Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____		
Wetland Hydrology Present?	Yes X	No ____		

Remarks:
Point taken in an assumed excavated area with hydrophytic vegetation. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W30-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/1	100					Clay Loam	
4-24	10YR 3/1	85	5YR 4/3	15	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W30-2u

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.570309 Long: -96.748205 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	90	Yes	FACU
2. *Phalaris arundinacea*	10	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	100 (A)		380 (B)

Prevalence Index = B/A = 3.8

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W30-2u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on position on top of manmade berm, and prevalence of smooth brome

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W30-2w

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.570292 Long: -96.748355 Datum: WGS84

Soil Map Unit Name: Shelby clay loam, 7 to 12 percent slopes NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W30-2w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down. presumed hydric based on landscape position and dominance of hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W31-1u

Investigator(s): JL CP Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 4 Lat: 40.550242 Long: -96.741983 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken at edge of harvested soybean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Conium maculatum*	15	Yes	FACW
2. *Setaria viridis*	10	Yes	UPL
3. *Abutilon theophrasti*	10	Yes	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	35	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	10	x 5 =	50
Column Totals:	35 (A)		120 (B)
Prevalence Index = B/A =			3.43

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean.

SOIL

Sampling Point: PRB-W31-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/2	100					Clay Loam	
6-10	10YR 3/1	95	7.5YR 4/6	5	C	M	Clay Loam	
10-16	10YR 3/1	90	7.5YR 4/6	10	C	M	Clay Loam	
16-24	10YR 3/3	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 11/18/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W31-1w

Investigator(s): CP, JL Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 40.550271 Long: -96.742119 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
No dig due to utilities in ROW. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Sambucus canadensis*	15	Yes	FACW
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	85	Yes	FACW
2. *Conium maculatum*	15	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	115	x 2 =	230
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		230 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W31-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on presence of hydrophytic vegetation and wetland hydrology. Hydric soil indicator F6 was also found in the adjacent upland soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W32-1u

Investigator(s): RS Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.551887 Long: -96.740192 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	8	Yes	UPL
2. *Kochia scoparia*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	13	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	5	x 4 =	20
UPL species	8	x 5 =	40
Column Totals:	13 (A)		60 (B)

Prevalence Index = B/A = 4.62

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Edge of harvested bean field, appears to have been a healthy crop.

SOIL

Sampling Point: PRB-W32-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a mapped soil rating of predominantly non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W32-1w

Investigator(s): RS Section, Township, Range: S27, T007N, R006E

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 40.551966 Long: -96.739902 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	85	Yes	FACW
2. *Helianthus annuus*	15	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	100 (A)		230 (B)

Prevalence Index = B/A = 2.3

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W32-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down, presumed hydric based on a dominance of hydrophytic vegetation and landscape position.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W33-1u

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.570271 Long: -96.747105 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification: PEM1C

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	15	Yes	FACU
2. *Populus deltoides*	5	Yes	FAC
3. *Robinia pseudoacacia*	5	Yes	FACU
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Prunus virginiana*	15	Yes	FACU
2.			
3.			
4.			
5.			
	15	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	135	x 4 =	540
UPL species	0	x 5 =	0
Column Totals:	140 (A)		555 (B)
Prevalence Index = B/A =			3.96

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W33-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down. Soils assumed non-hydric based on a lack of hydrophytic vegetation and a mapped soil rating of predominantly non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W33-1w

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.57034 Long: -96.747147 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W33-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down, presumed hydric with 100% FACW vegetation and landscape position.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W34-1u

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Linear

Slope (%): 0 Lat: 40.569908 Long: -96.754707 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	105 (A)		420 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W34-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on elevated landscape position and 100% UPL and FACU vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/16/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W34-1w

Investigator(s): RS Section, Township, Range: S16, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.569873 Long: -96.754778 Datum: WGS84

Soil Map Unit Name: Nodaway silt loam, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Ulmus americana*	5	Yes	FACW
2.			
3.			
4.			
5.			
	5	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Ulmus americana*	20	Yes	FACW
2.			
3.			
4.			
5.			
	20	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	100	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	125	x 2 =	250
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	125 (A)		250 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W34-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down, presumed hydric based on dominance of hydrophytic vegetation and landscape position.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W35-1u

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 40.567405 Long: -96.779778 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway silty clay loams, frequently flooded NWI classification: PEM1Cx

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	100	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (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	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	100 (A)		400 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W35-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** ____ **No** X

Remarks:

Soils frozen from surface down, presumed non-hydric based on 100% FACU vegetation and landscape position.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: NPPD Princeton Road Power Station Branch Line City/County: Lancaster County Sampling Date: 12/17/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: PRB-W35-1w

Investigator(s): RS Section, Township, Range: S17, T007N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.567407 Long: -96.779727 Datum: WGS84

Soil Map Unit Name: Colo-Nodaway silty clay loams, frequently flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	95	Yes	FACW
2. *Persicaria pensylvanica*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PRB-W35-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Frozen soils

Depth (inches): 0

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils frozen from surface down, presumed hydric based on landscape position and 100% FACW vegetation

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
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- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Appendix D – Site Photographs

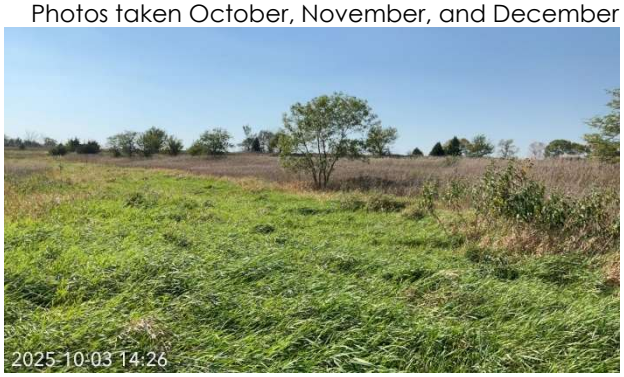

Photo 1. View of a degraded wet meadow community (PRB-W11), photo taken facing west.

Photo 2. View of a degraded wet meadow community (PRB-W13), photo taken facing north.

Photo 3. View of a degraded wet meadow community (PRB-W30), photo taken facing south.

Photo 4. View of a degraded wet meadow community (PRB-W31), photo taken facing north.

Photo 5. View of a shallow marsh community (PRB-W10), photo taken facing north.

Photo 6. View of a shallow marsh community (PRB-W29), photo taken facing west.

Photo 7. View of a seasonally flooded basin/farmed wetland community (PRB-W14), photo taken facing west.

Photo 8. View of a seasonally flooded basin/farmed wetland community (PRB-W17), photo taken facing north.

Photo 9. View of waterway PRB-S04, photo taken facing south.

Photo 10. View of waterway PRB-S12, photo taken facing southwest.

Photo 11. View of waterway PRB-S13, photo taken facing south.

Photo 12. View of waterway PRB-S14, photo taken facing north.

Photo 13. View of waterway PRB-S15, photo taken facing southeast.

Photo 14. View of waterway PRB-S16 (Middle Branch Big Nemaha River), photo taken facing southwest.

Photo 15. View of waterway PRB-S17, photo taken facing south.

Photo 16. View of waterway PRB-S18, photo taken facing northwest.

Photo 17. View of waterway PRB-S19 (Shaw Creek), photo taken facing east.

Photo 18. View of waterway PRB-S20, photo taken facing east.

Photo 19. View of waterbody PRB-OW09, photo taken facing east.

Photo 20. General photo of upland forest along an agricultural field, photo taken facing east.

Photo 21. General photo of upland forest, photo taken facing west.

Photo 22. General photo of upland forest, photo taken facing east.

Photo 23. General photo of maintained rights-of-way (ROW), photo taken facing south.

Photo 24. General photo of a hayfield, photo taken facing northwest.

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Photo 27. General photo of prairie, photo taken facing north.

Photo 28. General photo of grassland/old field, photo taken facing north.

Photo 29. General photo grassland/old field, photo taken facing east.

Photo 30. General photo of pasture, photo taken facing northeast.

Photo 31. General photo of the existing Northern Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5. Photo taken in November 2022 facing west.

Photo 32. General photo of the existing Northern Beatrice to Palmyra D-line and Beatrice to Palmyra E-line block valve 5. Photo taken in November 2022 facing northwest.

Des Moines C-Line Branch Line Extension

Des Moines C-Line South Loop Uprate

Wetland Delineation Report

Central Mainline Corridor
Expansion Project – Des Moines
C-line Branch Line and Des
Moines C-Line South Loop Uprate
Dallas and Polk Counties, Iowa
Stantec Project #: 172609221

Prepared for:

Northern Natural Gas
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Sign-off Sheet

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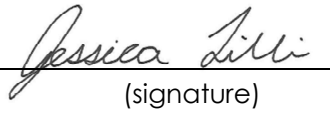
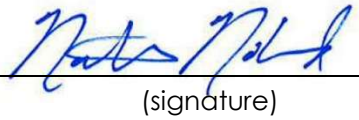
Prepared by  (signature)

Jessica Lillie, Environmental Scientist CMWP #1457

Reviewed by  (signature)

Nathan Noland, Environmental Scientist

Reviewed by (signature)

Bruce Galer, PG, CMWP (#1333), Associate, Senior Environmental Scientist

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1.0 INTRODUCTION

Stantec understands that Northern Natural Gas (Northern) is regulated by the Federal Energy Regulatory Commission (FERC) and is responsible to comply with the Clean Water Act and with applicable state and local wetland regulations. Both the United States (U.S.) Army Corps of Engineers (USACE) and Iowa Department of Natural Resources (IDNR) have regulatory authority over wetlands, navigable waters, and adjacent lands. Northern is required to review proposed actions and determine whether such actions may affect a waterbody or wetland under the jurisdiction of the IDNR or the USACE. Northern secured the services of Stantec Consulting Services Inc. (Stantec) to conduct an evaluation for the proposed Central Mainline Corridor Expansion Project – Des Moines C-line branch line and Des Moines C-Line South Loop Uprate (Project).

The Des Moines C-line branch line Environmental Survey Boundary (ESB) for the Project is approximately 245.87 acres in size and located in Sections 5, 8, 9, 15, and 16 Township 81 North, Range 26 West, Dallas County, Iowa (Appendix A, Figure 1). The ESB is oriented in a northwest to southeast position across multiple agricultural fields with the center of the ESB near the intersection of 140th Street and Upland Avenue.

The Des Moines C-Line South Loop Uprate ESB for the Project is comprised of:

1. The Grimes Iowa town border station (TBS) located in Section 8, Township 80 North, Range 25 West in Polk County, Iowa and is approximately 3.69 acres in size;

2. the Royal Estates reducing station located in Section 1, Township 81 North, Range 26 West and Section 6, Township 80 North, Range 25 West in Dallas and Polk Counties, Iowa and is approximately 4.71 acres in size; and

3. the Des Moines A-line launcher facility located in Sections 26 and 35, Township 80 North, Range 25 West in Polk County, Iowa, and is approximately 10.22 acres in size.

The purpose and objective of the wetland determination and delineation was to identify the extent and spatial arrangement of wetlands and waterways within the ESB. Stantec conducted field investigations in November 2025. Field surveys were not conducted at the Grimes Iowa TBS or the area east of Iowa State Highway 17 at the Royal Estates reducing station because these areas were previously delineated in 2021 as part of the Des Moines A-Line Capacity and Replacement Project, and no previously identified resources occur within the current Project component footprint.

Wetland and waterways may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the IDNR, and local regulation under jurisdiction of local county, town, city, or village. Stantec recommends this report be submitted to local authorities, the IDNR. and USACE for final jurisdictional review and concurrence, as necessary.

2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), and applicable Regional Supplements to the *Corps of Engineers Wetland Delineation Manual*.

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. Antecedent precipitation was determined prior to the field investigation utilizing the USACE Antecedent Precipitation Tool (APT) (USACE 2025a). The tool compares precipitation totals from the three months prior to the date of the field efforts with 30-year normal amounts, calculating a weighted multi-month score and determining the climate conditions (dry, normal, wet).

A review of USDA Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP) aerial imagery and other available aerial imagery was conducted for the ESB to assist in the wetland delineation because farmed areas are present within the ESB with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wetland signatures within the farmed areas. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria.

The presence of mapped poorly and somewhat poorly drained soils, NWI mapping, and topography within the ESB was reviewed in conjunction with an analysis of available aerial imagery for wetland signatures in these areas. For each potential wetland area identified in the aerial imagery review, a sample point was collected during the field investigation. If the sample point met the wetland criteria, then the wetland area was mapped in the field.

The wetland boundary and sampling points were identified and surveyed with an iPad equipped with a Global Navigational Satellite System (GNSS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.

2.2 WATERWAYS

Observed waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features were mapped and described. Geomorphological characteristics of each waterway were collected at a waterway sample point, including the width and height of top of bank, the width and height of the ordinary high-water mark (OHWM), and channel substrate. The waterway lines, polygons, and sample point locations were surveyed with an iPad equipped with ESRI Field Maps and a GNSS capable of sub-meter accuracy and mapped using GIS software. However, the review of waterway potential for federal jurisdiction was beyond the scope of the investigation.

3.0 RESULTS

3.1 SITE DESCRIPTION

3.1.1 Des Moines C-Line Branch Line ESB

The Des Moines C-line branch line ESB is comprised primarily of active agricultural fields, maintained rights-of-way (ROW), existing Northern facilities, old fields, small areas of upland forest, and a riparian corridor. Overall, the Des Moines C-line branch line ESB is relatively level, with steeper slopes surrounding the riparian corridor and associated waterways. The Des Moines C-line branch line ESB is bordered by active agriculture lands, rural residential properties, and the Saylorville Wildlife Management Area to the east (Appendix A, Figure 1).

NRCS soils present within the Des Moines C-line branch line ESB and their hydric status are summarized in Table 1 and mapped in Appendix A, Figure 2.

Table 1. Summary of Soils Identified within the Des Moines C-Line Branch Line

Soil Survey of Dallas County, Iowa	Map Unit	Hydric Rating
Clarion loam, Bemis moraine, 2 to 6 percent slopes	L138B	Non-Hydric
Nicollet loam, 1 to 3 percent slopes	L55	Predominantly Non-Hydric
Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes	L507	Hydric
Webster clay loam, Bemis moraine, 0 to 2 percent slopes	L107	Predominantly Hydric
Clarion loam, Bemis moraine, 6 to 10 percent slopes, moderately eroded	L138C2	Non-Hydric
Lester loam, Bemis moraine, 2 to 6 percent slopes	L236B	Non-Hydric
Hayden-Storden loams, 25 to 50 percent slopes	356G	Non-Hydric

The NWI map identified several riverine features within the Des Moines C-line branch line ESB (Appendix A, Figure 3). A majority of these features were determined to be associated with upland drainage during the field investigation.

Precipitation was analyzed using the USACE APT which calculates a three-month rolling precipitation total. Precipitation was considered *normal* prior to the field investigations on November 3-4, 2025, and precipitation was considered *drier than normal* prior to the field investigations on November 6, 2025, as shown in the precipitation figures in Appendix B.

3.1.2 Des Moines C-Line South Loop Uprate ESB

The Des Moines South Loop Uprate ESB encompasses the Grimes Iowa TBS and the Des Moines A-line launcher facility in Polk County, Iowa; and the Royal Estates reducing station in Dallas and Polk counties, Iowa. These areas are comprised primarily of active agricultural fields, maintained ROW, existing Northern facilities, old field/grasslands, and pasture. Overall, the Des Moines South

Loop Uprate ESB is relatively flat, with steeper slopes along the public road within the Royal Estates reducing station ESB. The Des Moines South Loop Uprate ESB is bordered by active agriculture lands, pasture, and residential properties (Appendix A, Figure 1).

NRCS soils present within the Des Moines South Loop Uprate ESB and their hydric status are summarized in Table 2 and mapped in Appendix A, Figure 2.

Table 2. Summary of Soils Identified within the Des Moines C-Line South Loop Uprate ESB

Soil Survey of Dallas and Polk Counties, Iowa	Map Unit	Hydric Rating
Clarion loam, 9 to 14 percent slopes, moderately eroded	138D2	Non-Hydric
Clarion loam, Bemis moraine, 6 to 10 percent slopes	L138C	Non-Hydric
Storden loam, Bemis moraine, 10 to 22 percent slopes, moderately eroded	L62E2	Non-Hydric
Wadena loam, 2 to 6 percent slopes	108B	Non-Hydric
Cylinder loam, 0 to 2 percent slopes	203	Predominantly Non-Hydric
Biscay clay loam, 0 to 2 percent slopes	259	Hydric
Clarion loam, Bemis moraine, 2 to 6 percent slopes	L138B	Non-Hydric
Nicollet loam, 1 to 3 percent slopes	L55	Predominantly Non-Hydric

The NWI map identified no wetland or riverine features within the Des Moines South Loop Uprate ESB (Appendix A, Figure 3).

Precipitation was analyzed using the USACE APT which calculates a three-month rolling precipitation total. Precipitation was considered *normal* prior to the field investigations on November 3, 2025, for the Royal Estates reducing station and Des Moines A-line launcher facility, as shown in the precipitation figures in Appendix B.

3.2 WETLANDS

3.2.1 Des Moines C-Line Branch Line ESB

During the 2025 field investigations five wetlands were identified and delineated within the Des Moines C-line branch line ESB. Wetland determination data forms were completed for sample points along transects through the wetlands and adjacent uplands and are contained in Appendix C. Photographs of the wetland communities are contained in Appendix D. The wetland boundary and sample point locations are shown on Appendix A, Figure 4. The wetlands are summarized in Table 3 and described in detail in the following sections.

Table 3. Summary of Wetlands Identified within the Des Moines C-Line Branch Line ESB

Wetland ID	Wetland Classification		Federal Jurisdictional Determination[1]	Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39			
DMS-W01	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.45
DMS-W02	Seasonally Flooded Basin/Farmed Wetland, Degraded Wet Meadow	PEM1A/Bdf Type 1, Type 2	Potentially Jurisdictional	DMS-S03	0.09
DMS-W03	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.06
DMS-W04	Degraded Wet Meadow	PEM1Bd Type 2	Not Likely Jurisdictional	DMS-S06	0.04
DMS-W05	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.30

[1]Jurisdictional determination per USACE determination 33 CFR Part 328 on November 13, 1987

Palustrine Emergent Wetlands (Seasonally Flooded Basin/Farmed Wetland)

Four palustrine emergent (PEM) wetlands identified onsite were characterized as seasonally flooded basins/farmed wetlands which usually lack standing water throughout most of the growing season but are covered with water or waterlogged within a few inches of the surface during variable seasonal periods. Due to seasonally flooded wetlands remaining dry for much of the year these wetlands are often farmed. In the case of a farmed wetland, soil and vegetation are often considered disturbed due to plowing or tilling practices and the replacement of natural hydrophytic vegetation with cultivated crops. Seasonally flooded basins will fill shallow basins and support vegetation types such as grasses, sedges, and annual plants; or the vegetation is disturbed with cultivated crops and herbicide treatment.

Vegetation when present within the seasonally flooded basin/farmed wetland communities often included reed canary grass (*Phalaris arundinacea*), barnyard grass (*Echinochloa crus-galli*), yellow nutsedge (*Cyperus esculentus*), and stunted or stressed crops such as soybean (*Glycine max*). Wetland hydrology indicators observed within these wetlands consisted of Stunted or Stressed Plants (D1), Geomorphic Position (D2), and a positive FAC-Neutral Test (D5). Hydric soil indicators identified at the wetland sample points included Thick Dark Surface (A12) and Other. The hydric soil indicator "Other" is an assumed hydric soil indicator based on the top 24 inches of the soil sample consisting of a dark matrix color in an area mapped as hydric by the NRCS.

Palustrine Emergent Wetlands (Degraded Wet Meadow)

One PEM wetland (DMS-W02) identified onsite was characterized as wet meadow which usually lacks standing water throughout most of the growing season but is saturated within a few inches of the surface. Vegetation typically includes grasses, sedges, rushes, and short broad-leaved plants. Wet meadow characterized wetlands within the ESB were considered degraded due to a dominance of invasive species such as reed canary grass, recurring farm practices within or adjacent to the wetland, and/or a location within roadside ROW.

Typical vegetative species documented within the degraded wet meadow wetland communities included reed canary grass, prairie cordgrass (*Spartina pectinata*), and lance-leaved aster (*Symphyotrichum lanceolatum*). Wetlands within this community were observed to have secondary wetland hydrology indicators Geomorphic Position (D2) and a positive FAC-Neutral Test (D5). Hydric soil indicators observed at the wetland sample points included Other. The hydric soil indicator "Other" is an assumed hydric soil indicator based on the top 24 inches of the soil sample consisting of a dark matrix color in an area mapped as hydric by the NRCS.

Wetland DMS-W02 was characterized as having both degraded wet meadow and seasonally flooded basins/farmed wetland communities.

3.2.2 Des Moines C-Line South Loop Uprate ESB

During the 2025 field investigations, one wetland was identified and delineated within the Des Moines C-Line South Loop Uprate ESB in the Des Moines A-line launcher facility. The wetland was delineated using desktop methods and field verified to the extent practicable from adjacent property, due to landowner access restrictions; therefore, no wetland determination data forms were completed. No additional wetlands were identified within other components of the Des Moines C-Line south loop uprate. Field surveys were not conducted at the Grimes Iowa TBS or the area east of Iowa State Highway 17 at the Royal Estates reducing station because these areas were previously delineated in 2021 as part of the Des Moines A-Line Capacity and Replacement Project, and no previously identified resources occur within the current Project component footprint. Photographs of the wetland are contained in Appendix D. The wetland boundary is shown on Appendix A, Figure 4. The wetland is summarized in Table 4 and described in detail in the following sections.

Table 4. Summary of Wetlands Identified within the Des Moines C-Line South Loop Uprate ESB

Wetland ID	Wetland Classification		Federal Jurisdictional Determination[1]	Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39			
DAL-W01	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	Not Likely Jurisdictional	No	0.18

[1]Jurisdictional determination per USACE determination 33 CFR Part 328 on November 13, 1987

Palustrine Emergent Wetland (Seasonally Flooded Basin/Farmed Wetland)

The palustrine emergent (PEM) wetland identified onsite was characterized as seasonally flooded basins/farmed wetland (see section 3.2.1 for description).

No volunteer vegetation was observed within the wetland from the adjacent property. The wetland was instead dominated by stunted and stressed corn (*Zea mays*). Soils were assumed to be hydric based on a NRCS mapped rating of hydric for the wetland area. No wetland determination data forms were completed due to landowner access restrictions.

3.3 UPLANDS

3.3.1 Des Moines C-Line Branch Line ESB

Uplands consisted of active agricultural fields, maintained rights-of-way (ROW), existing Northern facilities, old fields, small areas of upland forest, and a ravine. Dominant plant species identified in the upland herb layer were smooth brome (*Bromus inermis*), yellow foxtail (*Setaria pumila*), giant foxtail (*Setaria faberi*), red clover (*Trifolium pratense*), giant ragweed (*Ambrosia trifida*), cup plant (*Silphium perfoliatum*), white clover (*Trifolium repens*), reed canary grass, Canada thistle (*Cirsium arvense*), tall goldenrod (*Solidago altissima*), Indian grass (*Sorghastrum nutans*), Queen Anne's lace (*Daucus carota*), horseweed (*Conyza canadensis*), prairie cordgrass, and cultivated species such as corn and soybean. Dominant tree and shrub layer species consisted of red-osier dogwood (*Cornus sericea*), white mulberry (*Morus alba*), gray dogwood (*Cornus racemosa*), black walnut (*Juglans nigra*), hackberry (*Celtis occidentalis*), cottonwood (*Populus deltoides*), box elder (*Acer negundo*), Missouri gooseberry (*Ribes missouriense*), American elm (*Ulmus americana*), Amur honeysuckle (*Lonicera maackii*), and coralberry (*Symphoricarpos orbiculatus*).

Soils in each upland area are mapped by the NRCS and depicted on Appendix A, Figure 2, and are also listed on the data sheets found in Appendix C. Occasionally, soils met hydric soil indicator Thick Dark Surface (A12) or Other, often just outside of wetland boundaries or in depressions within agricultural fields. When hydric soils were met in an upland, wetland hydrology or hydrophytic vegetation criteria were not met.

No primary indicators of hydrology were observed in the upland areas, and the uplands were found at similar or higher elevations than the wetland.

3.3.2 Des Moines C-Line South Loop Uprate ESB

Uplands consisted of active agricultural fields, maintained rights-of-way (ROW), existing Northern facilities, pasture, grassland, and maintained lawn. Dominant plant species identified in the upland herb layer were smooth brome, switchgrass (*Panicum virgatum*), giant ragweed, quackgrass (*Elymus repens*), Kentucky bluegrass (*Poa pratensis*), Indian grass, big bluestem (*Andropogon gerardii*), and cultivated species such as corn. Dominant tree and shrub layer species consisted of Siberian elm (*Ulmus pumila*), white mulberry, and gray dogwood.

Soils in each upland area are mapped by the NRCS and depicted on Appendix A, Figure 2. No soil pits were taken within the Des Moines C-Line South Loop Uprate ESB due to utilities present. Soils were instead assumed hydric based on the NRCS mapped soil rating for the sampled area. When NRCS mapped hydric soils were identified in an upland, wetland hydrology or hydrophytic vegetation criteria were not met.

No primary indicators of hydrology were observed in the upland areas, and the uplands were found at similar or higher elevations than the wetland.

3.4 WATERWAYS

3.4.1 Des Moines C-Line Branch Line ESB

The 2025 field investigations identified six waterways within the Des Moines C-line branch line ESB. Characteristics of these waterways are summarized in Table 5 and are depicted on Appendix A, Figure 4.

Table 5. Summary of Waterways Identified within the Des Moines C-Line Branch Line ESB

Waterway ID	Flow Class	Height of Bank (feet)[1]	Top of Bank Width of Stream (feet)[1]	Water Depth (feet)[1]	Associated Surface Waters	Acreage within the ESB
DMS-S01	Intermittent	5	9	0.10	No	0.03
DMS-S02	Intermittent	4	4	0	No	<0.01
DMS-S03	Intermittent	1.5	5	0.25	DMS-W02	0.01
DMS-S04	Intermittent	4	6	0.10	No	0.02
DMS-S05	Intermittent	5	7	0.5	DMS-S06	0.09
DMS-S06	Intermittent	12	9	0.5	DMS-W04, DMS-S05	0.23

[1]Waterway bank and depth measurements are approximate

3.4.2 Des Moines C-Line South Loop Uprate ESB

No waterways were identified within the Des Moines C-Line South Loop Uprate ESB during the November 2025 field investigations; and no waterways were identified as part of previous survey data

3.5 WATERBODIES

The 2025 field investigations identified no waterbodies within the Des Moines C-line branch line ESB or the Des Moines C-Line South Loop Uprate ESB; and no waterbodies were identified as part of previous survey data.

3.6 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways within the Project ESB. However, there may be other regulated environmental features within the Project ESB, including, but not limited to, historical or archeological features, endangered or threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or restrict land uses within or in close proximity to these features. Stantec can assist with

identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

4.0 CONCLUSION

Stantec performed a wetland and waterway determination and delineation for the Central Mainline Corridor Expansion Project – Des Moines C-line branch line and Des Moines C-Line South Loop Uprate on behalf of Northern. The purpose and objective were to identify the extent and spatial arrangement of wetlands and waterways within the Project ESB.

During the 2025 field investigations, a total of six wetlands and six waterways were identified and delineated within the Project ESB in accordance with state and federal guidelines and were subsequently surveyed with GNSS and mapped using GIS software.

There was a combined total of 1.12 acres of wetlands and 0.38 acre of waterways delineated within the ESB. The identified PEM wetlands were characterized as seasonally flooded basin/farmed wetland and degraded wet meadow wetland communities. Identified waterways were classified as intermittent streams/modified agricultural ditches. No other waterbodies were identified within the Project ESB. Adjacent uplands were primarily composed of active agricultural fields, pasture, maintained ROW and lawn, existing Northern facilities, and grassland.

The water resources identified for this report may be subject to federal regulation under the jurisdiction of USACE, state regulation under the jurisdiction of the IDNR and local regulation under jurisdiction of the local, county, town, city, or village. Stantec recommends this report be submitted to local authorities, the IDNR, and USACE for final jurisdictional review and approvals as necessary.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that Northern obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed work to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present in the ESB at the time of the fieldwork. The delineation was performed by experienced and qualified professionals using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE, and in some cases, the IDNR or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the ESB can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the ESB.

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Appendix A – Figures

Figure 1. Project Location and Topography

Figure 2. NRCS Soil Survey

Figure 3. National Wetlands Inventory

Figure 4. Field Collected Data

Figure No.

1

Title

Project Location & 1-Mile Buffer
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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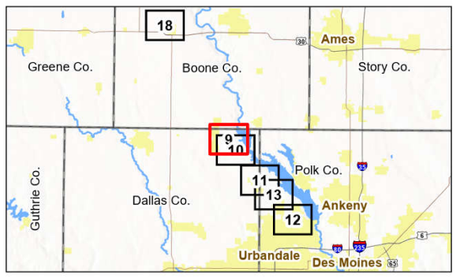
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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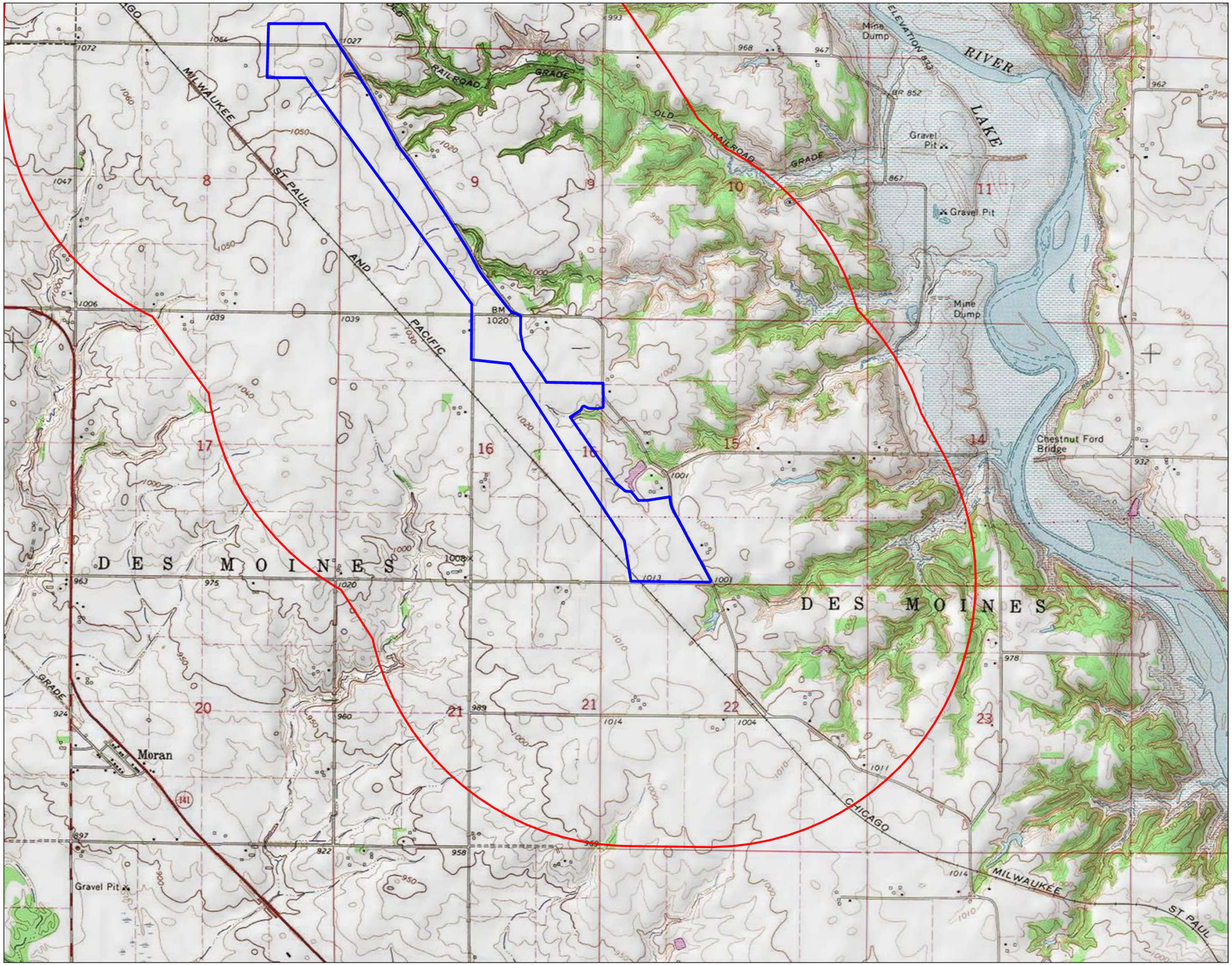

Figure No.

1

Title

Project Location & 1-Mile Buffer
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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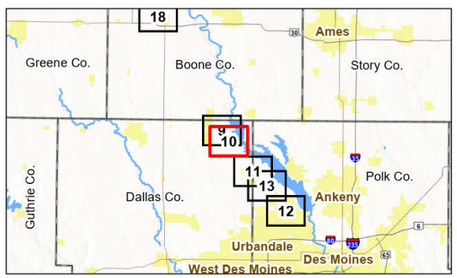
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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Figure No.

1

Title

Project Location & 1-Mile Buffer
Des Moines C-Line South Loop Uprate - Royal Estates Reducing Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Townships of Grant & Jefferson
Dallas & Polk Counties, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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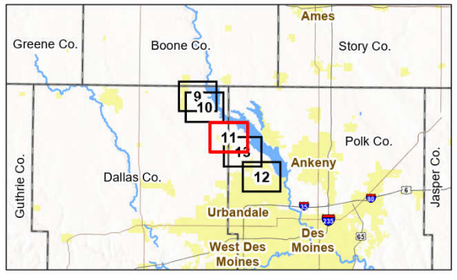
- 1-Mile Buffer



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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Figure No.

1

Title

Project Location & 1-Mile Buffer
Des Moines C-Line South Loop Uprate - Des Moines A-line Launcher Facility

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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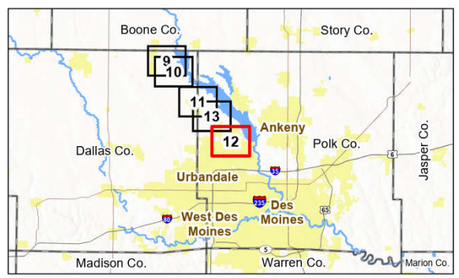
- 1-Mile Buffer



Notes
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2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

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Northern Natural Gas

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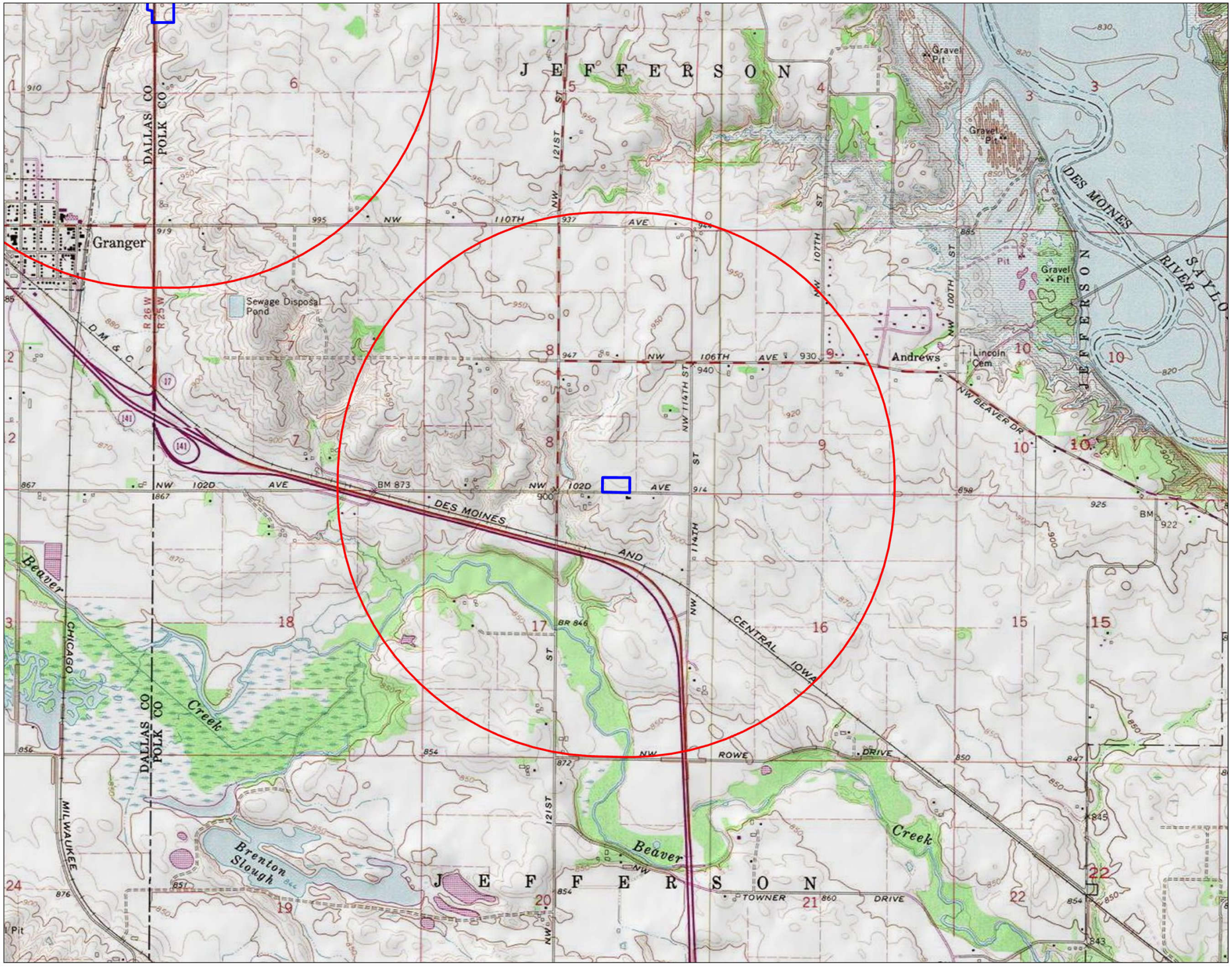

Figure No.

1

Title

Project Location & 1-Mile Buffer
Des Moines C-Line South Loop Uprate - Grimes Iowa TBS

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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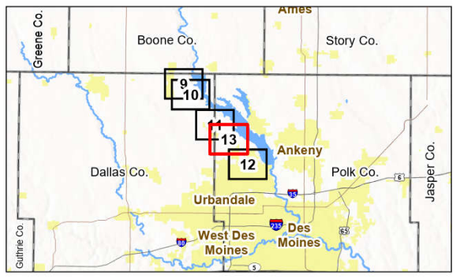
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

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Northern Natural Gas

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Revised: 2026-03-20 By safoster
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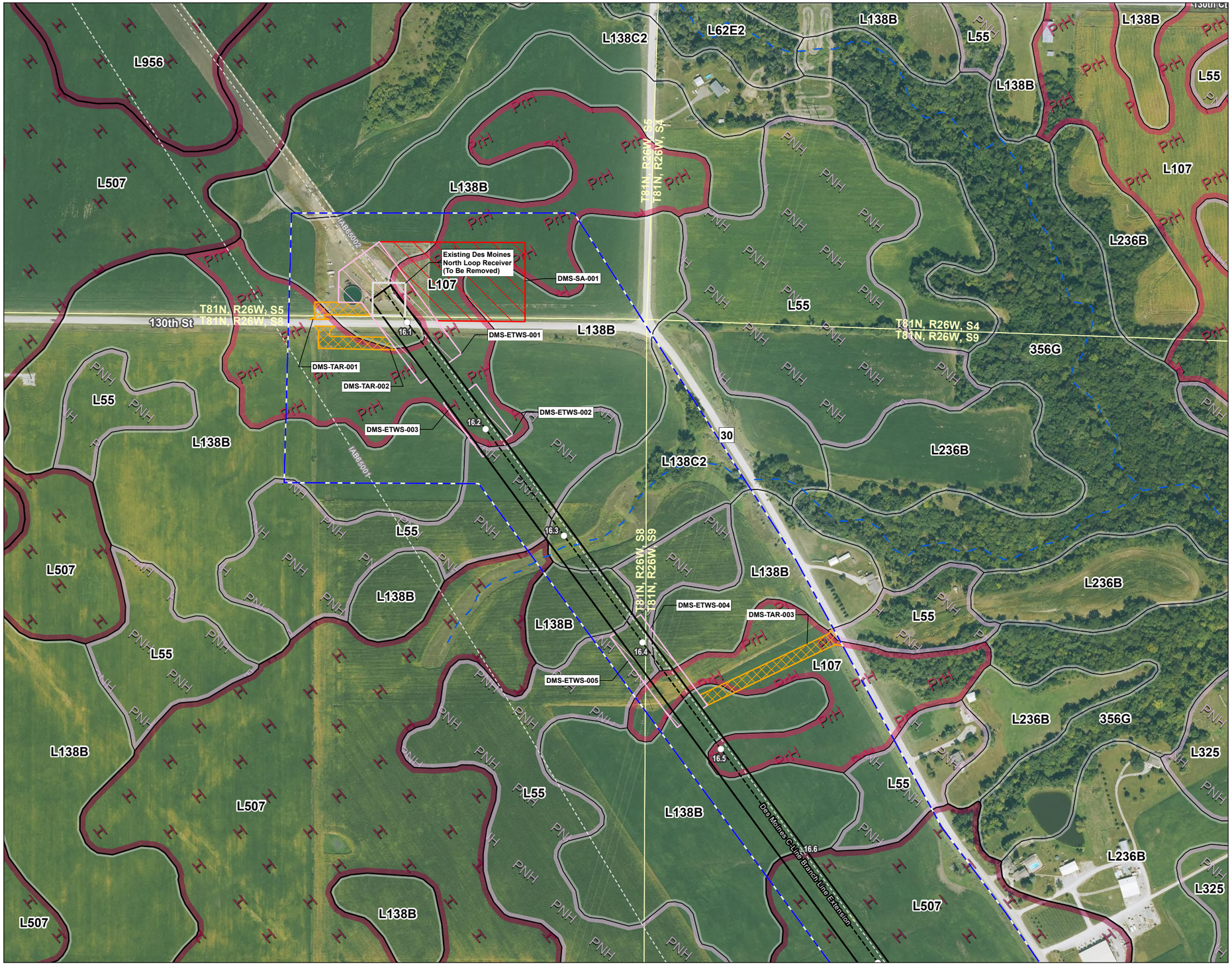

Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

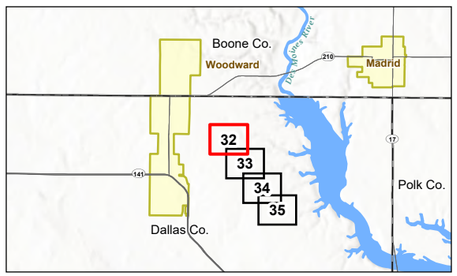
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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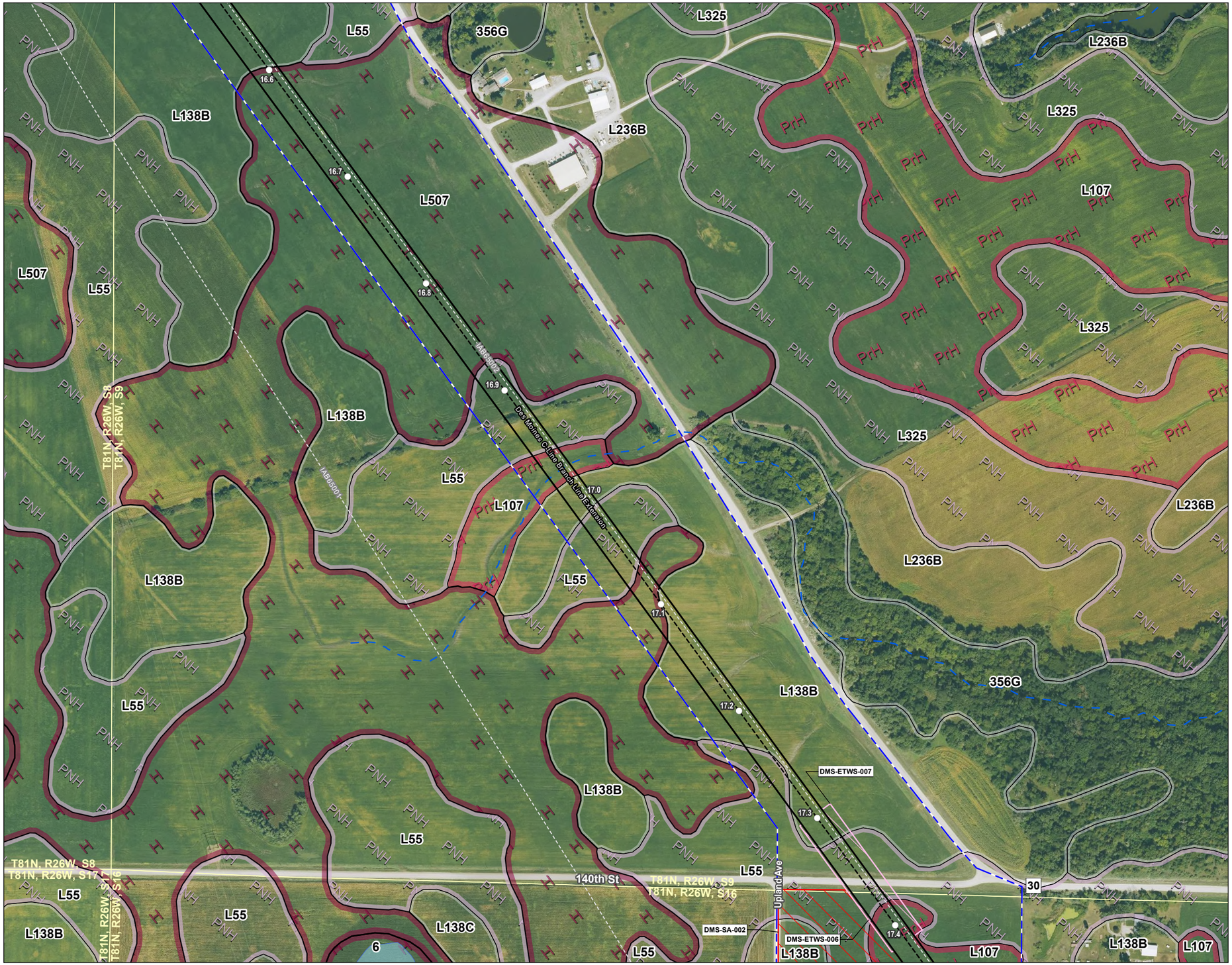

Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area

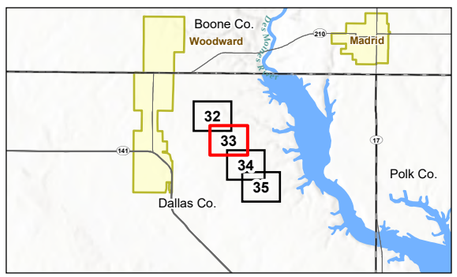
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

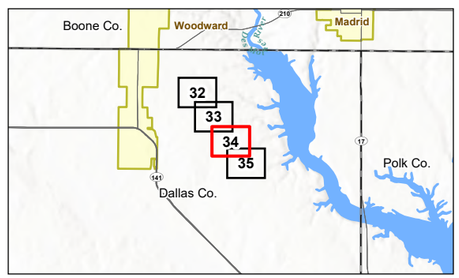
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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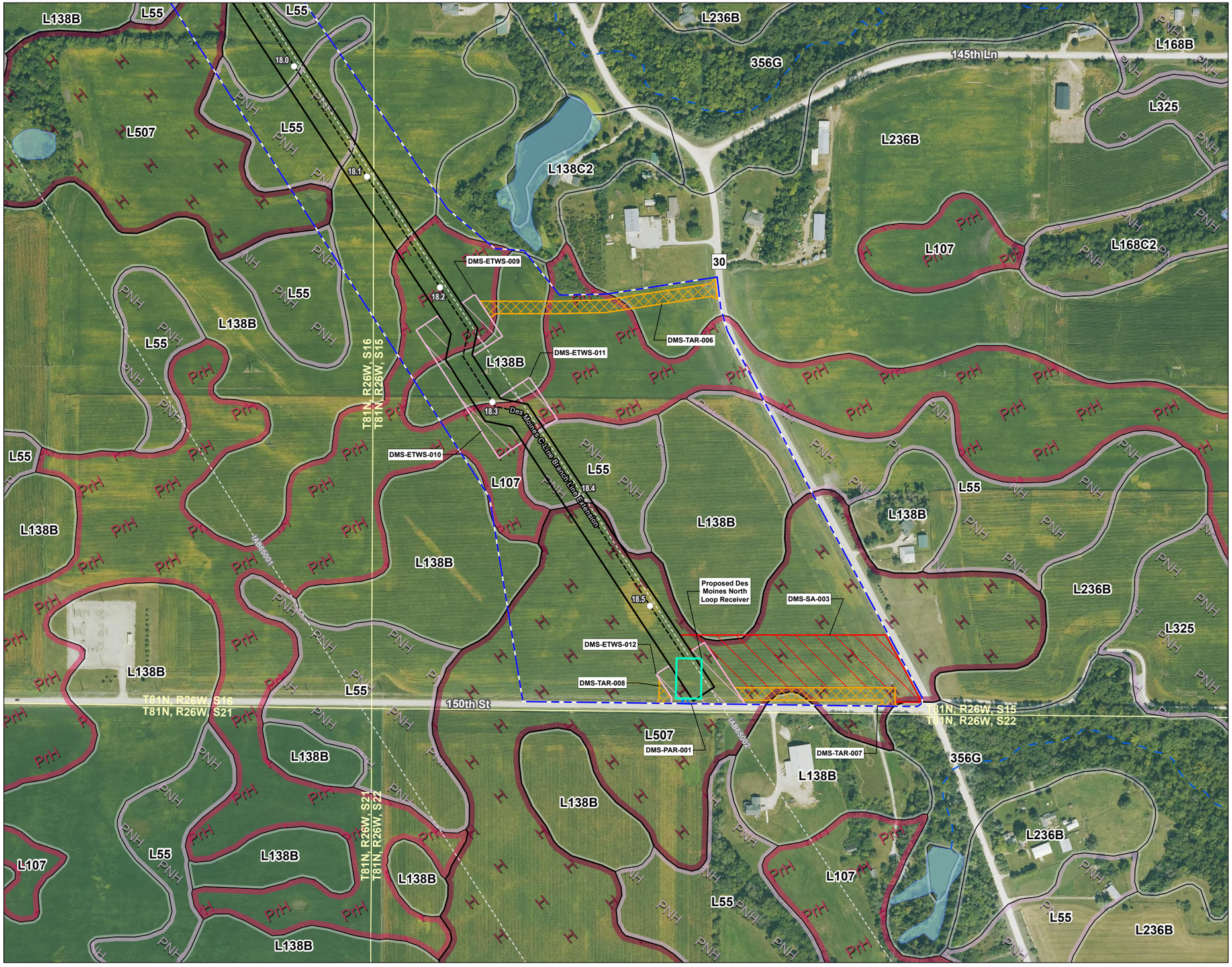


Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area

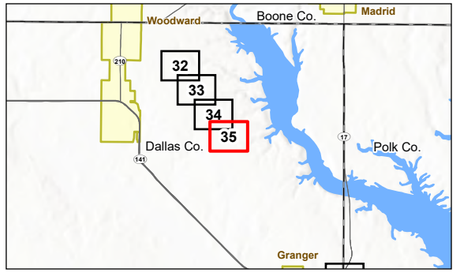
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line South Loop Uprate - Royal Estates Reducing Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Townships of Grant & Jefferson
Dallas & Polk Counties, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace

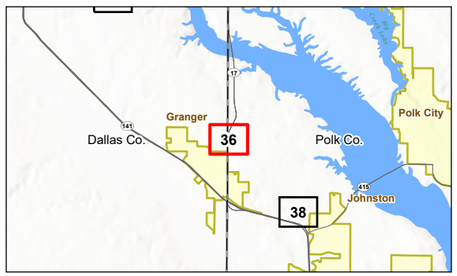
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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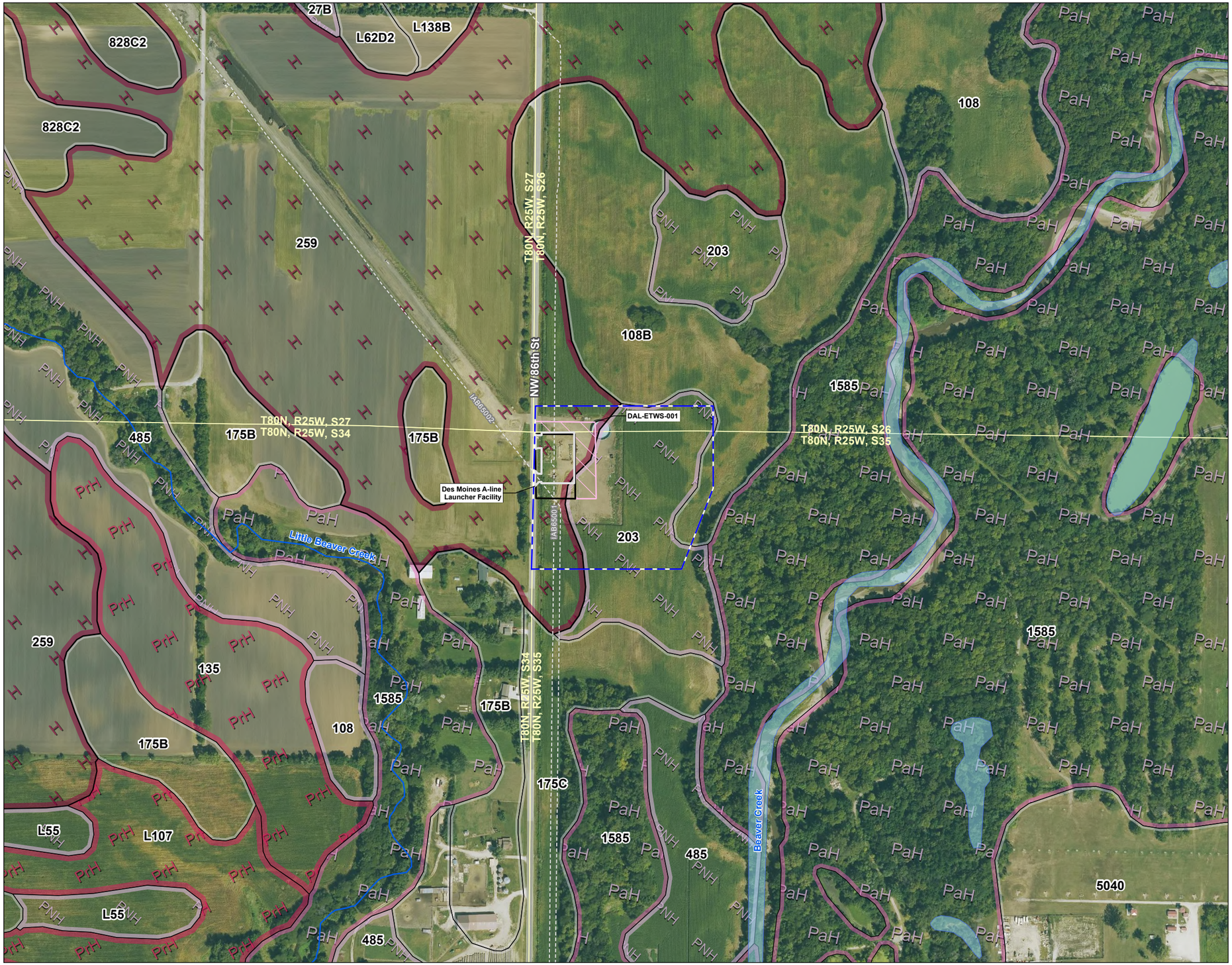


Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line South Loop Uprate - Des Moines A-line Launcher Facility

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace

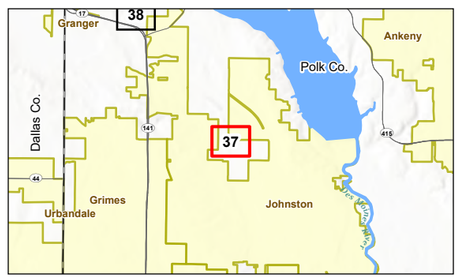
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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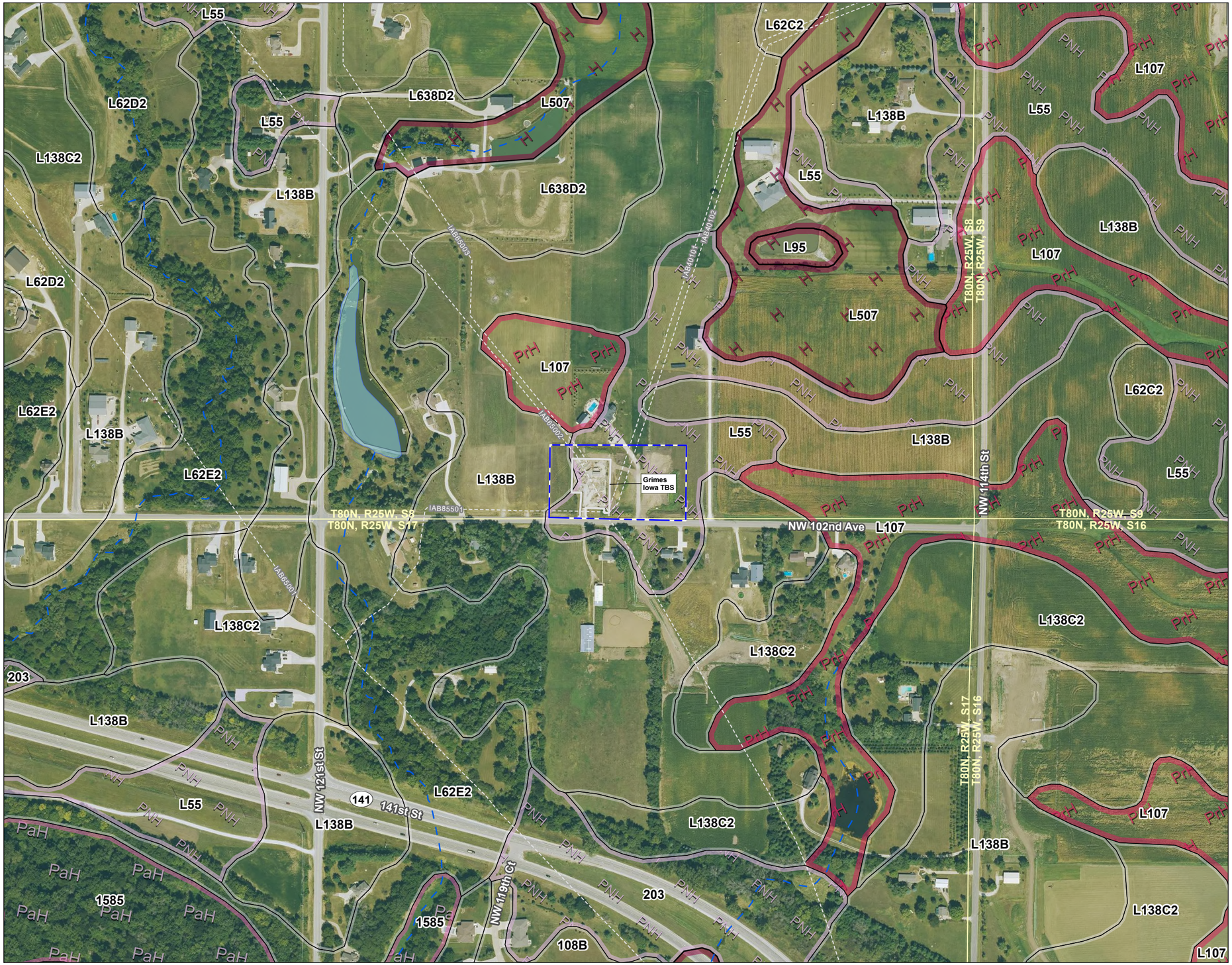

Figure No.

2

Title

NRCS Soil Survey Data
Des Moines C-Line South Loop Uprate - Grimes Iowa TBS

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace

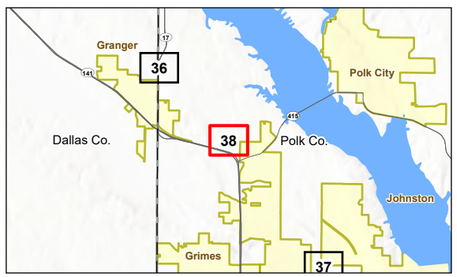
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

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Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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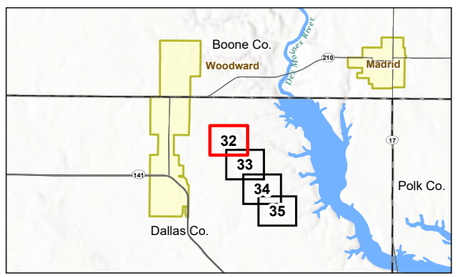
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project — 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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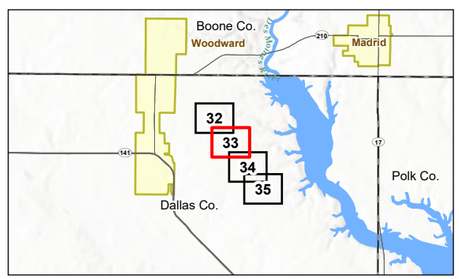
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

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Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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(At original document size of 11x17)
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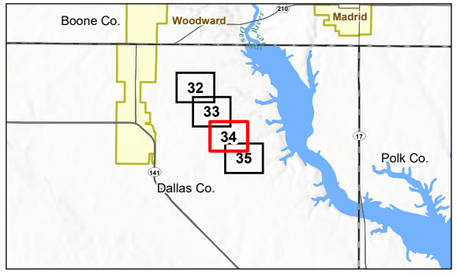
Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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3. Background: NAIP 2023

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Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

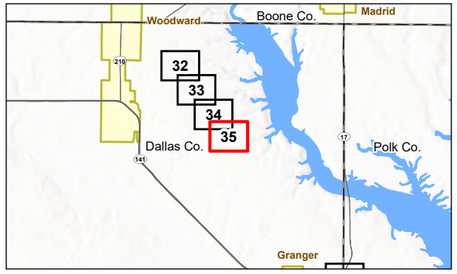
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

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3. Background: NAIP 2023

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Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Des Moines C-Line South Loop Uprate - Royal Estates Reducing Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Townships of Grant & Jefferson
Dallas & Polk Counties, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

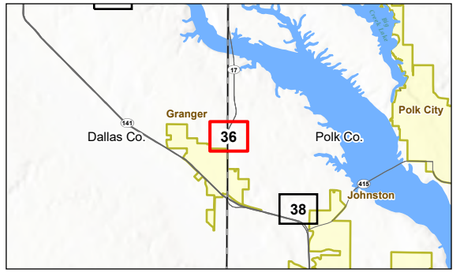
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
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Northern Natural Gas

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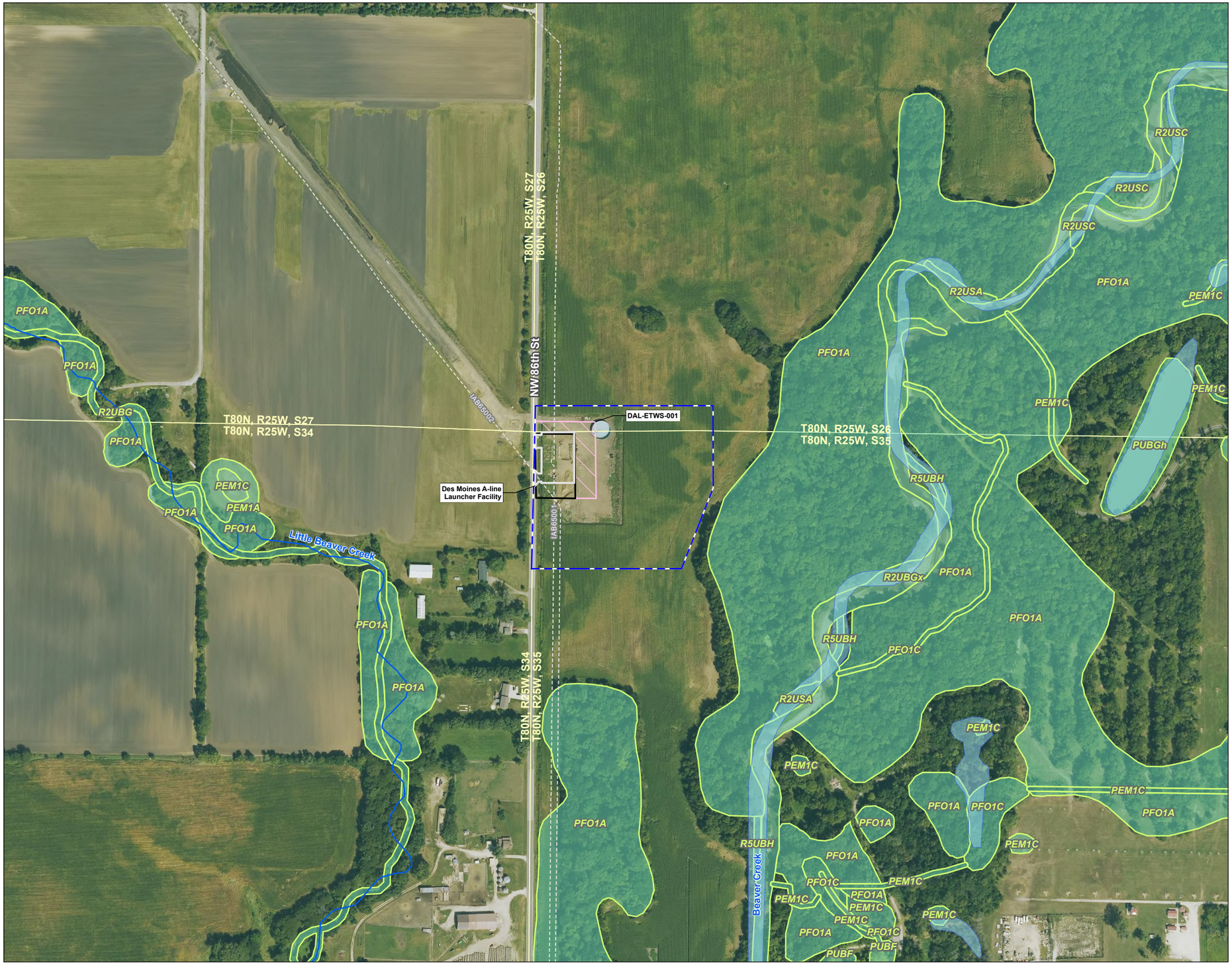


Figure No.
3

Title
National Wetlands Inventory
Des Moines C-Line South Loop Uprate - Des Moines A-line Launcher Facility

Client/Project
Northern Natural Gas
Central Mainline Corridor Expansion Project

172609221

Project Location
Township of Jefferson
Polk County, Iowa

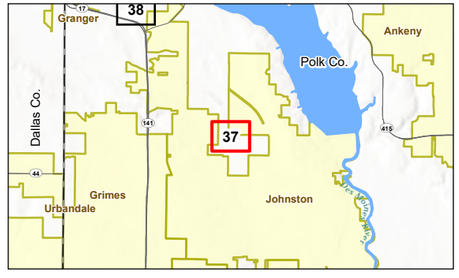
Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Des Moines C-Line South Loop Uprate - Grimes Iowa TBS

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

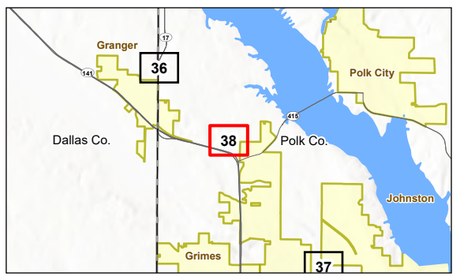
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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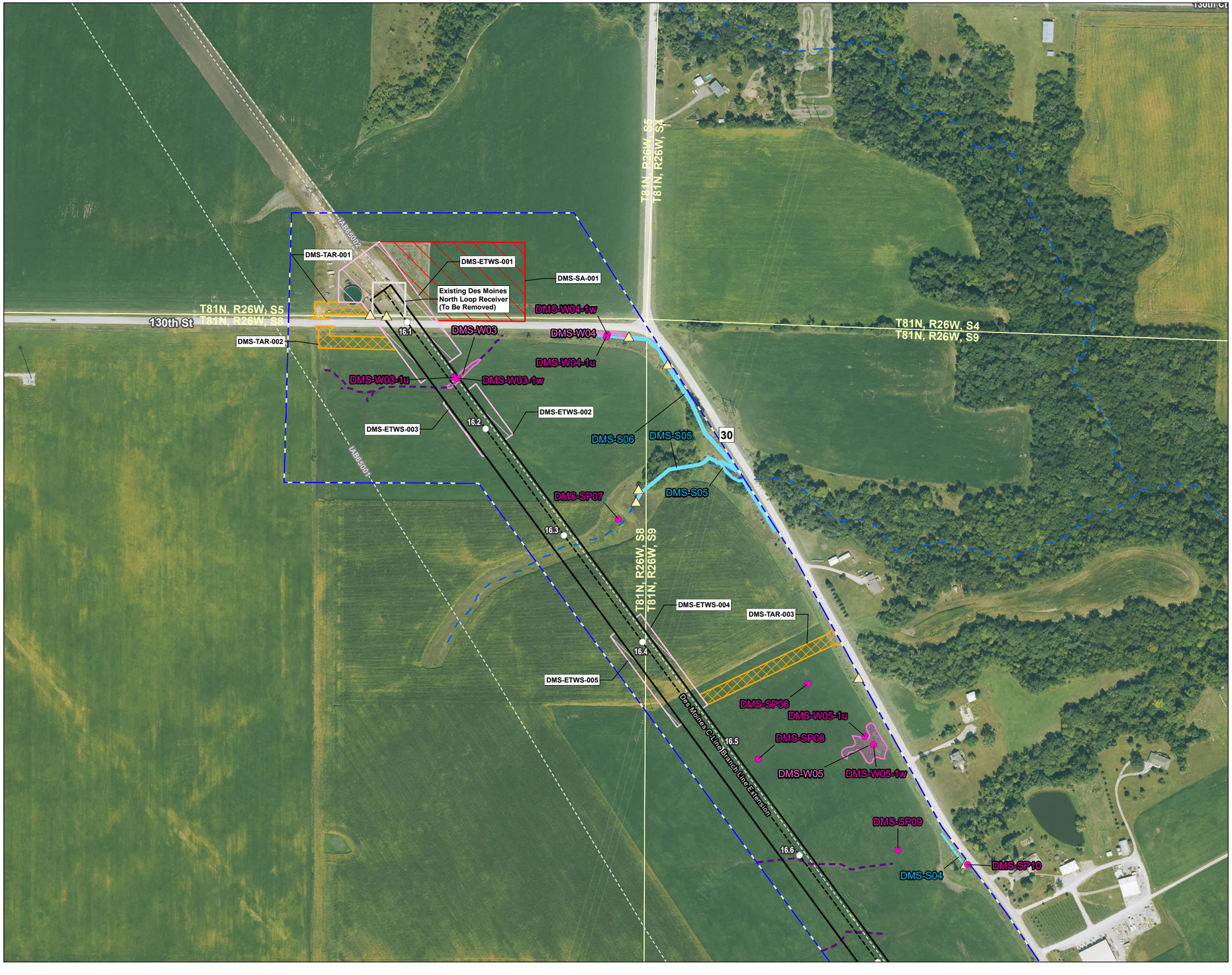


Figure No.

4

Title

Field Collected Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

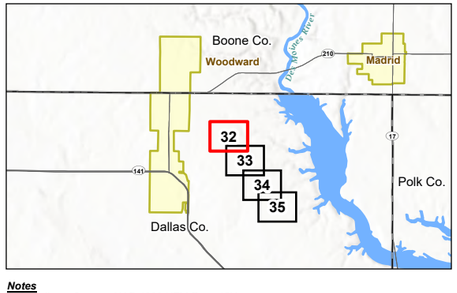
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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U:\172611\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

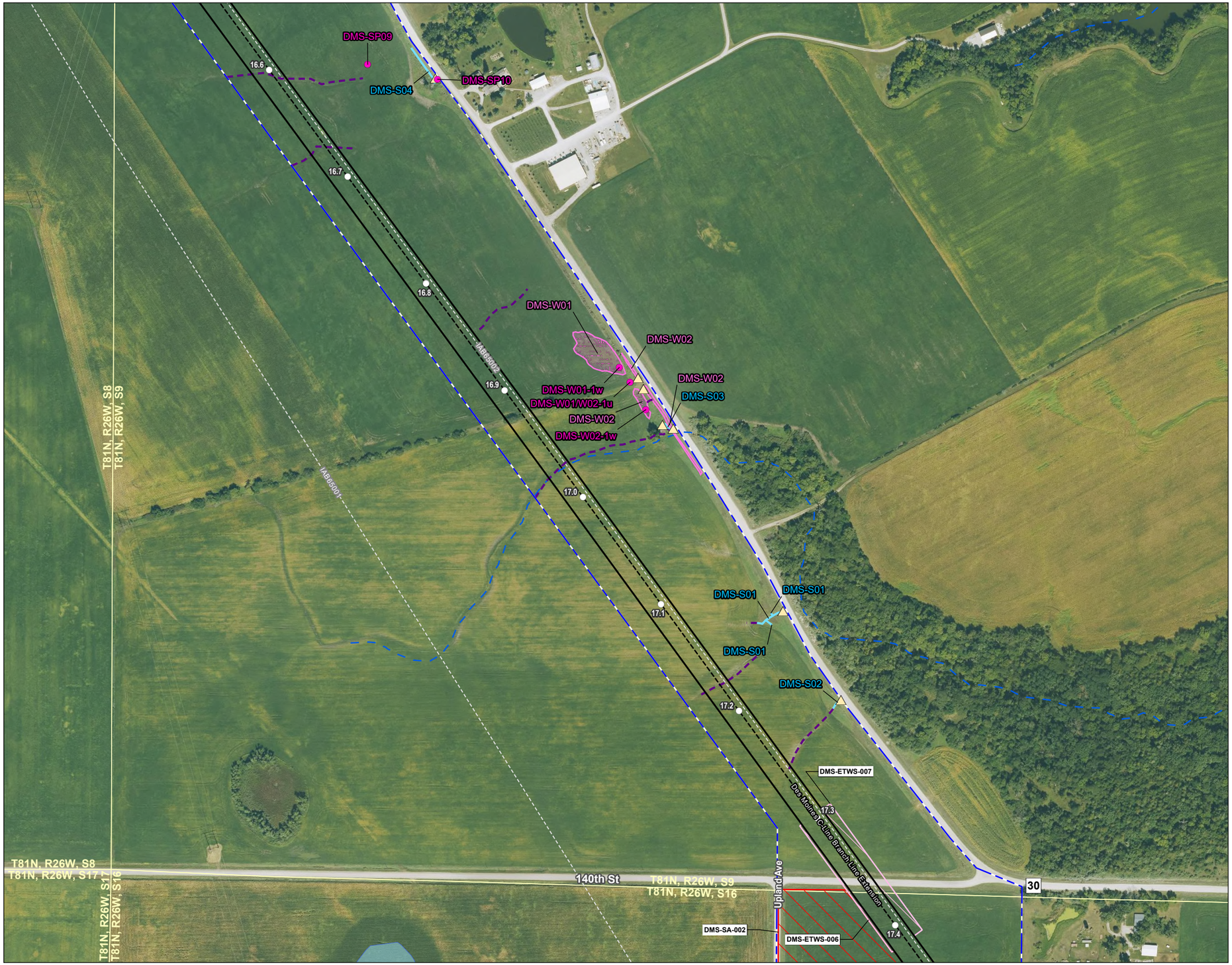


Figure No.

4

Title

Field Collected Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

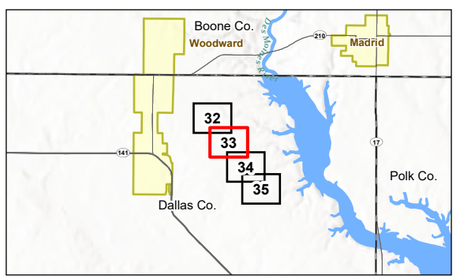
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

U:\172601\172609221\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

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Figure No.

4

Title

Field Collected Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

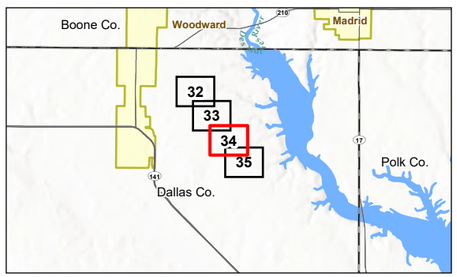
Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Sample Point
- Upland Drainage Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Des Moines C-Line Branch Line Extension

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Des Moines
Dallas County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

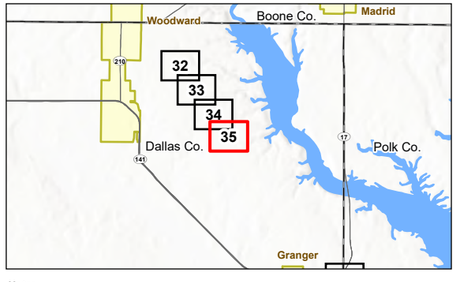
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Mile Post
- Proposed Pipeline
- Existing Pipeline
- Environmental Survey Boundary
- Proposed Facility
- Permanent Access Road
- Temporary Workspace
- Extra Temporary Workspace
- Temporary Access Road
- Staging Area
- Culvert
- Sample Point
- Upland Drainage Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Des Moines C-Line South Loop Uprate - Royal Estates Reducing Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Townships of Grant & Jefferson
Dallas & Polk Counties, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

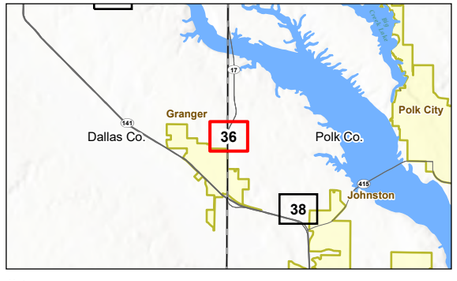
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Sample Point

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Des Moines C-Line South Loop Uprate -
Des Moines A-line Launcher Facility

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

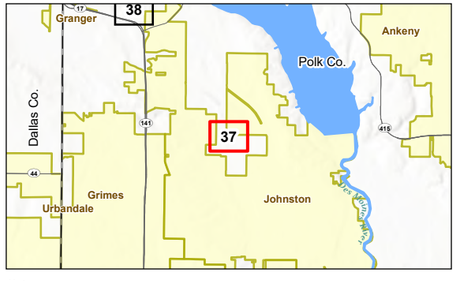
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace
- Extra Temporary Workspace
- Culvert
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Des Moines C-Line South Loop Uprate - Grimes Iowa TBS

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Jefferson
Polk County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

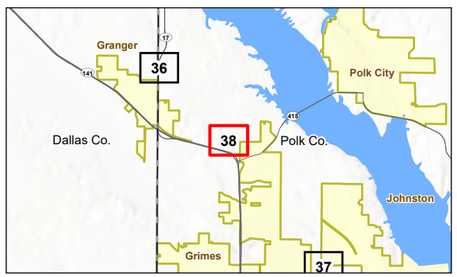
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Temporary Workspace

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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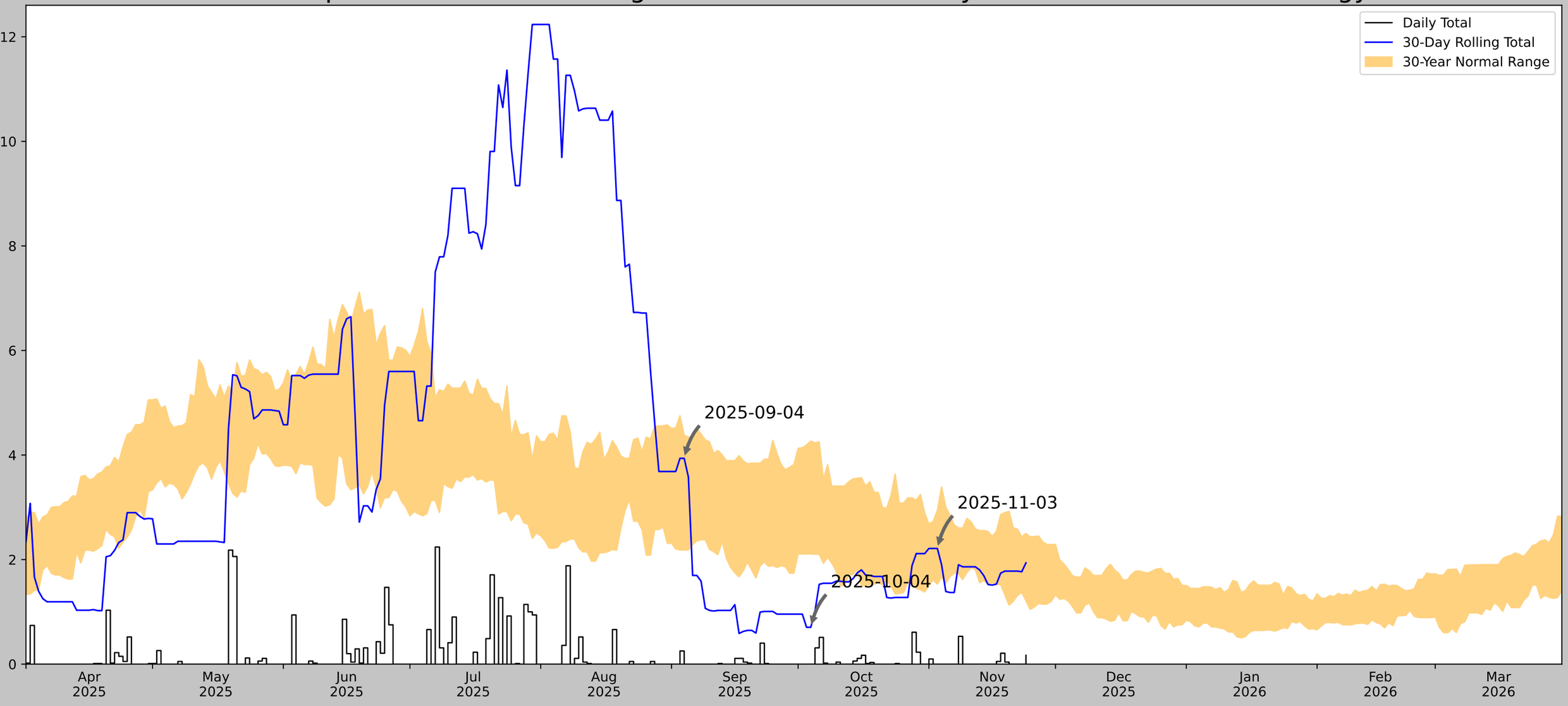
Appendix B – Antecedent Precipitation

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.83793, -93.88349
Observation Date	2025-11-03
Elevation (ft)	1003.604
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-03	1.529134	2.944095	2.212598	Normal	2	3	6
2025-10-04	2.10748	4.266929	0.704724	Dry	1	2	2
2025-09-04	2.183071	4.37441	3.937008	Normal	2	1	2
Result							Normal Conditions - 10

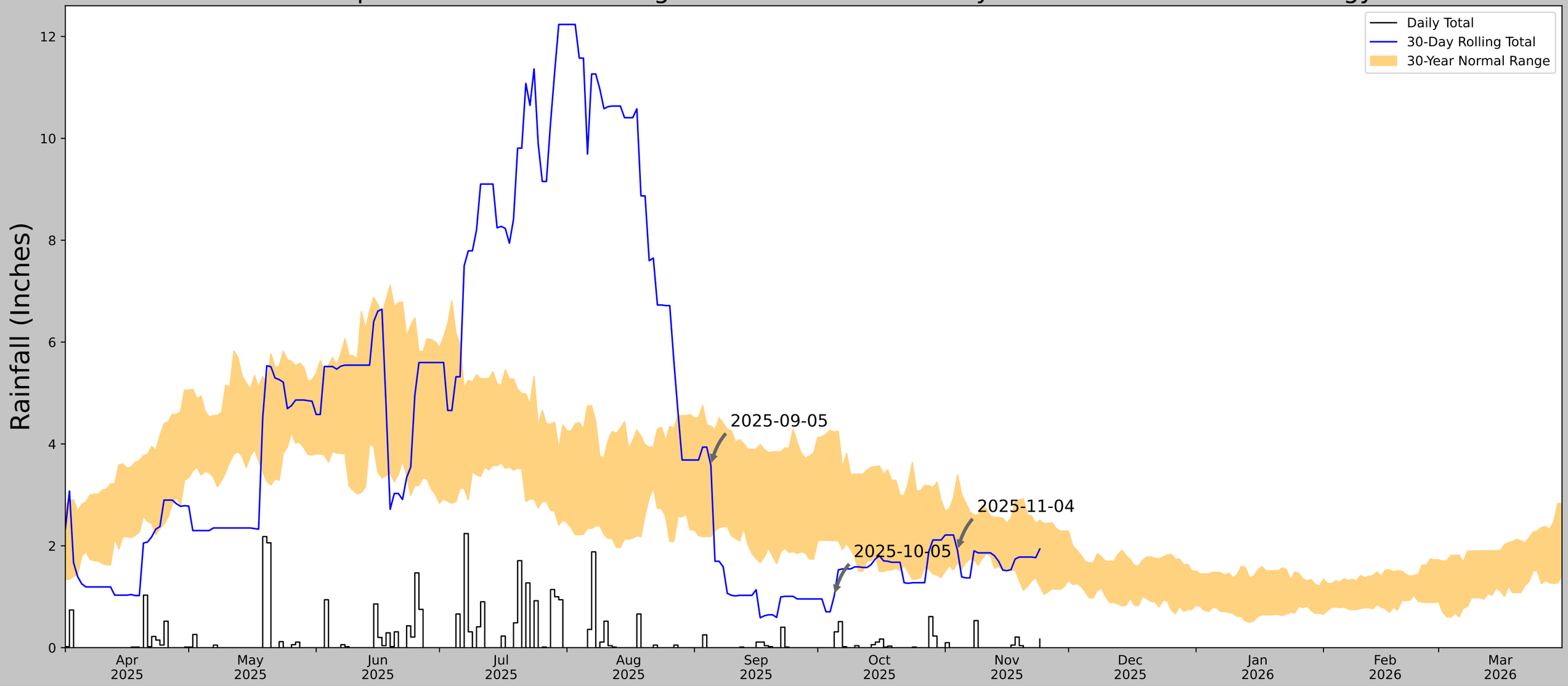
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
DES MOINES WSFO-JOHNSTON	41.7367, -93.7236	958.99	10.806	44.614	5.345	10919	89
JOHNSTON 3.7 NNW	41.7366, -93.7236	958.99	0.007	0.0	0.003	35	0
ANKENY	41.7322, -93.65	975.066	3.808	16.076	1.775	396	0
POLK CITY 1.0 N	41.787, -93.7194	875.984	3.482	83.006	1.856	1	1
DES MOINES INTL AP	41.5339, -93.6531	938.976	14.477	20.014	6.804	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.83793, -93.88349
Observation Date	2025-11-04
Elevation (ft)	1003.604
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-04	1.670866	3.39252	1.901575	Normal	2	3	6
2025-10-05	2.101575	4.23504	1.015748	Dry	1	2	2
2025-09-05	2.183071	4.346851	3.57874	Normal	2	1	2
Result							Normal Conditions - 10

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

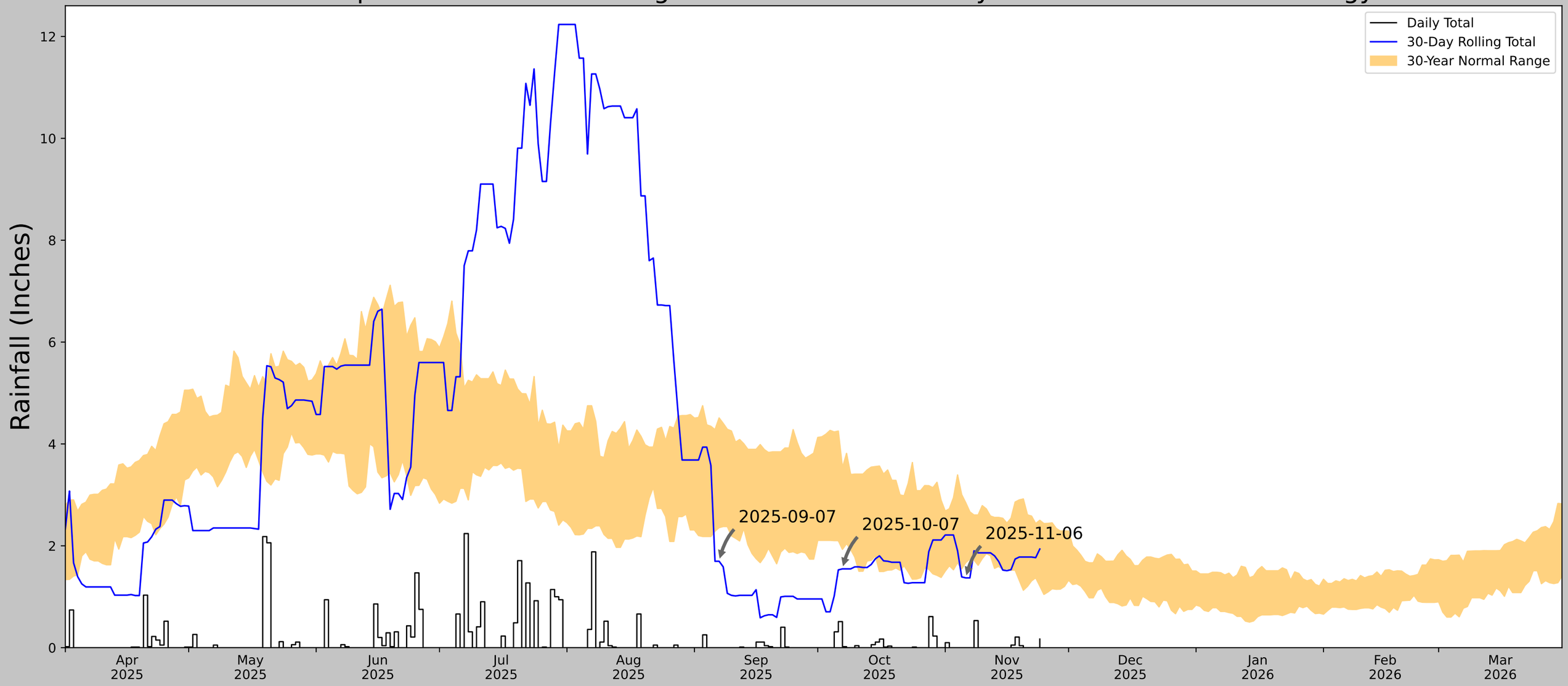
US Army Corps of Engineers.

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
DES MOINES WSFO-JOHNSTON	41.7367, -93.7236	958.99	10.806	44.614	5.345	10919	89
JOHNSTON 3.7 NNW	41.7366, -93.7236	958.99	0.007	0.0	0.003	35	0
ANKENY	41.7322, -93.65	975.066	3.808	16.076	1.775	396	0
POLK CITY 1.0 N	41.787, -93.7194	875.984	3.482	83.006	1.856	1	1
DES MOINES INTL AP	41.5339, -93.6531	938.976	14.477	20.014	6.804	2	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.83793, -93.88349
Observation Date	2025-11-06
Elevation (ft)	1003.604
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-06	1.670866	2.843701	1.370079	Dry	1	3	3
2025-10-07	1.929528	3.535433	1.547244	Dry	1	2	2
2025-09-07	2.356299	4.511417	1.69685	Dry	1	1	1
Result							Drier than Normal - 6

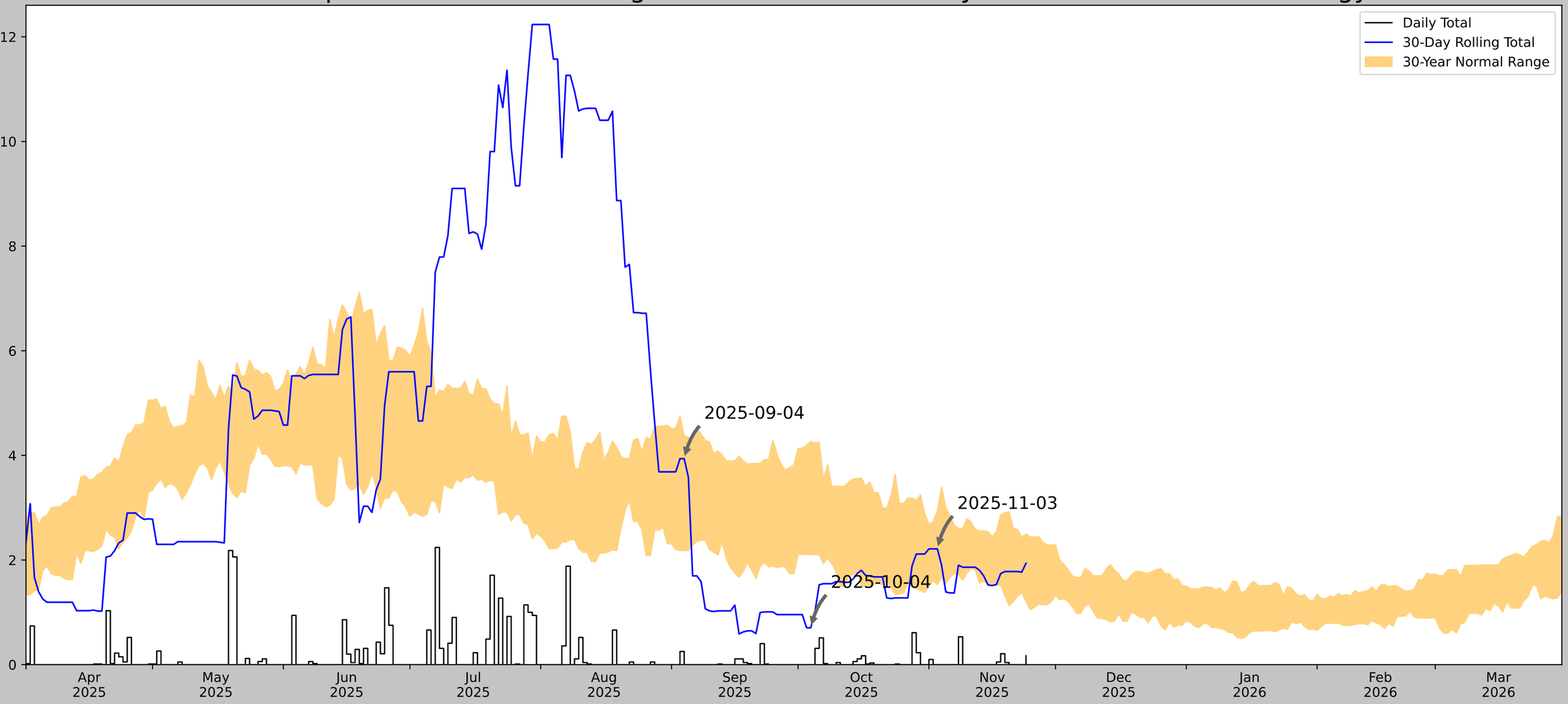
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
DES MOINES WSFO-JOHNSTON	41.7367, -93.7236	958.99	10.806	44.614	5.345	10919	89
JOHNSTON 3.7 NNW	41.7366, -93.7236	958.99	0.007	0.0	0.003	35	0
ANKENY	41.7322, -93.65	975.066	3.808	16.076	1.775	396	0
POLK CITY 1.0 N	41.787, -93.7194	875.984	3.482	83.006	1.856	1	1
DES MOINES INTL AP	41.5339, -93.6531	938.976	14.477	20.014	6.804	2	0



Coordinates	41.70207, -93.73495
Observation Date	2025-11-03
Elevation (ft)	823.491
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-03	1.529134	2.944095	2.212598	Normal	2	3	6
2025-10-04	2.10748	4.266929	0.704724	Dry	1	2	2
2025-09-04	2.183071	4.37441	3.937008	Normal	2	1	2
Result							Normal Conditions - 10

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
DES MOINES WSFO-JOHNSTON	41.7367, -93.7236	958.99	2.463	135.499	1.442	10919	89
JOHNSTON 3.7 NNW	41.7366, -93.7236	958.99	0.007	0.0	0.003	35	0
ANKENY	41.7322, -93.65	975.066	3.808	16.076	1.775	396	0
POLK CITY 1.0 N	41.787, -93.7194	875.984	3.482	83.006	1.856	1	1
DES MOINES INTL AP	41.5339, -93.6531	938.976	14.477	20.014	6.804	2	0

Coordinates	41.77312, -93.81506
Observation Date	2025-11-03
Elevation (ft)	908.793
Drought Index (PDSI)	Mild wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-03	1.529134	2.944095	2.212598	Normal	2	3	6
2025-10-04	2.10748	4.266929	0.704724	Dry	1	2	2
2025-09-04	2.183071	4.37441	3.937008	Normal	2	1	2
Result							Normal Conditions - 10

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
DES MOINES WSFO-JOHNSTON	41.7367, -93.7236	958.99	5.344	50.197	2.673	10919	89
JOHNSTON 3.7 NNW	41.7366, -93.7236	958.99	0.007	0.0	0.003	35	0
ANKENY	41.7322, -93.65	975.066	3.808	16.076	1.775	396	0
POLK CITY 1.0 N	41.787, -93.7194	875.984	3.482	83.006	1.856	1	1
DES MOINES INTL AP	41.5339, -93.6531	938.976	14.477	20.014	6.804	2	0

Appendix C – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-SP01
Investigator(s): JP, MG | Section, Township, Range: S15, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 1-2 | Lat: 41.820698 | Long: -93.86607 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in tilled cornfield with no noticeable difference in stem density compared to the rest of the field. Drain tile nearby.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Clay Loam	
20-26	10YR 3/1	100					Clay Loam	Dense clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

D2 not applicable due to nearby drain tile in ditch.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-SP02
Investigator(s): JP, MG | Section, Township, Range: S15, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 1-2 | Lat: 41.82157 | Long: -93.869645 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Gradual depression in tilled corn. No change in corn stalk density (assumed no stunted/stressed corn).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-27	10YR 2/1	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a matrix top layer of 10YR2/1 in an area mapped a hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable- field is drain tiled. No evidence of stunted/stressed corn. Tilled corn in wetland signature has the same stem density as the rest of the field.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line City/County: Dallas County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: DMS-SP03

Investigator(s): JP, MG Section, Township, Range: S15, T081N, R026W

Landform (hillside, terrace, etc.): Talf Local relief (concave, convex, none): Linear

Slope (%): 0-1 Lat: 41.821354 Long: -93.870809 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
In healthy tilled corn. No evidence of stunting/stressed crops.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100					Clay Loam	
10-24	10YR 2/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-SP04
Investigator(s): JP, MG | Section, Township, Range: S16, T081N, R026W
Landform (hillside, terrace, etc.): Side slope | Local relief (concave, convex, none): Linear
Slope (%): 1-2 | Lat: 41.827755 | Long: -93.875939 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Upland forest strip between soy fields.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Celtis occidentalis*	50	Yes	FAC
2. *Morus alba*	15	Yes	FAC
3.			
4.			
5.			
	65	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lonicera maackii*	45	Yes	UPL
2. *Ribes cynosbati*	10	No	FAC
3.			
4.			
5.			
	55	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Sanicula canadensis*	35	Yes	FACU
2. *Lonicera maackii*	10	Yes	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 40 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	35	x 4 =	140
UPL species	55	x 5 =	275
Column Totals:	165 (A)		640 (B)
Prevalence Index = B/A =			3.88

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100					Loam	Multiple refusals on large roots.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS. Multiple refusals on large roots.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-SP05
Investigator(s): JP, MG | Section, Township, Range: S15, T081N, R026W
Landform (hillside, terrace, etc.): Dip | Local relief (concave, convex, none): Concave
Slope (%): 2-4 | Lat: 41.826172 | Long: -93.873001 | Datum: WGS84
Soil Map Unit Name: Clarion loam, Bemis moraine, 2 to 6 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in an unfarmed, weedy dip. Very mixed upland and wetland veg. Drain tile nearby.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Cornus racemosa*	35	Yes	FAC
2.			
3.			
4.			
5.			
	35	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	85	Yes	FACU
2. *Sorghastrum nutans*	15	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	35	x 3 =	105
FACU species	100	x 4 =	400
UPL species	0	x 5 =	0
Column Totals:	135 (A)		505 (B)

Prevalence Index = B/A = 3.74

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	Very compacted at bottom of profile.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

Soils assumed non-hydric based on a 10YR2/1 matrix top layer in an area mapped as non-hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Drain tile nearby - Geomorphic position not applicable.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line City/County: Dallas County Sampling Date: 11/04/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: DMS-SP06

Investigator(s): JP MG Section, Township, Range: S09, T081N, R026W

Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 41.845788 Long: -93.890693 Datum: WGS84

Soil Map Unit Name: Clarion loam, Bemis moraine, 2 to 6 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested farm field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested crop field, no volunteer vegetation present. Vegetation assumed non-hydric based on an absence of wetland hydrology and hydric soils.

SOIL

Sampling Point: DMS-SP06

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Clay Loam	
20-26	2.5Y 3/2	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/06/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-SP07
Investigator(s): JP, MG | Section, Township, Range: S08, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 3-5 | Lat: 41.84757 | Long: -93.893489 | Datum: WGS84
Soil Map Unit Name: Clarion loam, Bemis moraine, 6 to 10 percent slopes, moderately eroded | NWI classification: R4SBC
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Weedy grassland strip near near drain tile. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	65	Yes	FACU
2. *Setaria pumila*	20	No	FAC
3. *Phalaris arundinacea*	15	No	FACW
4. *Cirsium arvense*	8	No	FACU
5. *Scirpus atrovirens*	5	No	OBL
6.			
7.			
8.			
9.			
10.			
	113	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	15	x 2 =	30
FAC species	20	x 3 =	60
FACU species	73	x 4 =	292
UPL species	0	x 5 =	0
Column Totals:	113 (A)		387 (B)

Prevalence Index = B/A = 3.42

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Silty Clay Loam	
6-12	10YR 2/1	90	7.5YR 4/4	10	C	M	Silty Clay Loam	
12-24	10YR 2/1	98	7.5YR 4/4	2	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable - nearby drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line City/County: Dallas County Sampling Date: 11/06/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: DMS-SP08

Investigator(s): JP, MG Section, Township, Range: S09, T081N, R026W

Landform (hillside, terrace, etc.): Side slope Local relief (concave, convex, none): Linear

Slope (%): 0-1 Lat: 41.844962 Long: -93.891403 Datum: WGS84

Soil Map Unit Name: Webster clay loam, Bemis moraine, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soy field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP08

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on 10YR2/1 matrix top layer in an area mapped as predominantly hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line City/County: Dallas County Sampling Date: 11/06/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: DMS-SP09

Investigator(s): JP, MG Section, Township, Range: S09, T081N, R026W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 41.843982 Long: -93.889347 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soy in a very gradual depression. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP09

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Clay Loam	
20-26	10YR 3/1	99	10YR 5/6	1	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as predominantly hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-SP10
Investigator(s): JP MG | Section, Township, Range: S09, T081N, R026W
Landform (hillside, terrace, etc.): Backslope | Local relief (concave, convex, none): Convex
Slope (%): 100 | Lat: 41.843829 | Long: -93.888324 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in roadside ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Lonicera maackii*	50	Yes	UPL
2.			
3.			
4.			
5.			
	50	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	90	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	50	x 5 =	250
Column Totals:	140 (A)		430 (B)
Prevalence Index = B/A =			3.07

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-SP10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___Histosol (A1)
___Histic Epipedon (A2)
___Black Histic (A3)
___Hydrogen Sulfide (A4)
___Stratified Layers (A5)
___2 cm Muck (A10)
___Depleted Below Dark Surface (A11)
___Thick Dark Surface (A12)
___Iron Monosulfide (A18)
___Sandy Mucky Mineral (S1)
___5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

____ Iron-Manganese Masses (F12)
___Red Parent Material (F21)
____Very Shallow Dark Surface (F22)
__X__Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____
Depth (inches): _____

Hydric Soil Present? **Yes** __X__ **No** _____

Remarks:
No soil pit taken due to potential buried utilities. Soils assumed hydric based on a NRCS mapped rating of hydric for the sampled area.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
__X__ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** _____ **No** __X__

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

Remarks:
Surface water contained within stream bed and bank.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W01/W02-1u
Investigator(s): JP MG | Section, Township, Range: S09, T081N, R026W
Landform (hillside, terrace, etc.): Rise | Local relief (concave, convex, none): Convex
Slope (%): 0-5 | Lat: 41.840534 | Long: -93.885459 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken at edge of crop field and ditch.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Setaria pumila*	60	Yes	FAC
2. *Bromus inermis*	20	Yes	FACU
3. *Setaria faberi*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	25	x 4 =	100
UPL species	0	x 5 =	0
Column Totals:	85 (A)		280 (B)

Prevalence Index = B/A = 3.29

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-W01/W02-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100					Silty Clay Loam	
16-24	10YR 2/1	99	10YR 5/6	1	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W01-1w
Investigator(s): JP, MG | Section, Township, Range: S09, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 1-2 | Lat: 41.840697 | Long: -93.885618 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Slight depression in corner of harvested soybean field. Little to no soybean grew within wetland area (no stalk remnants) primarily volunteer vegetation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crusgalli*	70	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	70	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	70	x 2 =	140
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		140 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:
X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Little to no harvested soybean.

SOIL

Sampling Point: DMS-W01-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	Compacted.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W02-1w
Investigator(s): JP, MG | Section, Township, Range: S09, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 1-2 | Lat: 41.840237 | Long: -93.885221 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field with little to no remnants of crop. Wetland area is primarily volunteer vegetation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crusgalli*	60	Yes	FACW
2. *Phalaris arundinacea*	8	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	68	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	68	x 2 =	136
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	68 (A)		136 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Little to no harvested soybean remnants.

SOIL

Sampling Point: DMS-W02-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W03-1u
Investigator(s): JP MG | Section, Township, Range: S08, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-2 | Lat: 41.849104 | Long: -93.895918 | Datum: WGS84
Soil Map Unit Name: Webster clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean field, no natural vegetation present. Vegetation assumed non-hydric based on lack of wetland hydrology and evidence of stunted/stressed crops.

SOIL

Sampling Point: DMS-W03-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-14	10YR 2/1	100					Silty Clay Loam	
14-24	5Y 4/2	95	10YR 5/6	5	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/04/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W03-1w
Investigator(s): JP, MG | Section, Township, Range: S08, T081N, R026W
Landform (hillside, terrace, etc.): Dip | Local relief (concave, convex, none): Concave
Slope (%): 2-3 | Lat: 41.849095 | Long: -93.895859 | Datum: WGS84
Soil Map Unit Name: Webster clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Evidence of stunted soy and volunteer vegetation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Cyperus esculentus*	4	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	4	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	4	x 2 =	8
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	4 (A)		8 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Stunted soybean evidence.

SOIL

Sampling Point: DMS-W03-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Clay Loam	
20-24	5Y 4/1	97	10YR 4/6	3	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/06/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W04-1u
Investigator(s): JP MG | Section, Township, Range: S08, T081N, R026W
Landform (hillside, terrace, etc.): Shoulder | Local relief (concave, convex, none): Convex
Slope (%): 10 | Lat: 41.849566 | Long: -93.893693 | Datum: WGS84
Soil Map Unit Name: Clarion loam, Bemis moraine, 2 to 6 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken on ditch shoulder adjacent to field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Cornus racemosa*	75	Yes	FAC
2. *Morus alba*	25	Yes	FAC
3.			
4.			
5.			
	100	=Total Cover	

Herb Stratum (Plot size: 5 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Bromus inermis*	70	Yes	FACU
2. *Solidago altissima*	15	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	100	x 3 =	300
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	185 (A)		640 (B)

Prevalence Index = B/A = 3.46

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-W04-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-17	10YR 2/1	100					Clay Loam	
17-24	10YR 3/1	100					Clay Loam	Compacted at bottom of profile

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

Soils assumed non-hydric based on a 10YR2/1 matrix top layer in an area mapped as non-hydric by the NRCS and based on landscape position.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/06/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W04-1w
Investigator(s): JP, MG | Section, Township, Range: S08, T081N, R026W
Landform (hillside, terrace, etc.): Dip | Local relief (concave, convex, none): Concave
Slope (%): 2-5 | Lat: 41.849589 | Long: -93.893678 | Datum: WGS84
Soil Map Unit Name: Clarion loam, Bemis moraine, 2 to 6 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
In ditched wet meadow. Connected to waterway feature. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Phalaris arundinacea*	90	Yes	FACW
2. *Typha angustifolia*	5	No	OBL
3. *Panicum virgatum*	2	No	FAC
4. *Scirpus atrovirens*	2	No	OBL
5.			
6.			
7.			
8.			
9.			
10.			
	99	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	7	x 1 =	7
FACW species	90	x 2 =	180
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	99 (A)		193 (B)

Prevalence Index = B/A = 1.95

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-W04-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

No soil pit taken due to possibility of buried utilities. Soils assumed hydric based on the presence of wetland hydrology and hydrophytic vegetation.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line City/County: Dallas County Sampling Date: 11/06/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: DMS-W05-1u

Investigator(s): JP, MG Section, Township, Range: S09, T081N, R026W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 41.845221 Long: -93.889846 Datum: WGS84

Soil Map Unit Name: Webster clay loam, Bemis moraine, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: DMS-W05-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Clay Loam	
6-10	10YR 2/1	99	7.5YR 5/6	1	C	M	Clay Loam	Not prominent redox
10-24	10YR 2/1	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- _X_ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _X_ **No** ____

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as predominantly hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** _X_

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line Branch Line | City/County: Dallas County | Sampling Date: 11/06/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: DMS-W05-1w
Investigator(s): JP, MG | Section, Township, Range: S09, T081N, R026W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-1 | Lat: 41.845126 | Long: -93.889718 | Datum: WGS84
Soil Map Unit Name: Webster clay loam, Bemis moraine, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No X (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
In very slight depression in farm field. Point taken in an area with no harvested soy stalks (assumed stunted/stressed) adjacent to ditch. Climate conditions are drier than normal.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Echinochloa crusgalli*	25	Yes	FACW
2. *Setaria pumila*	5	No	FAC
3. *Abutilon theophrasti*	3	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	33	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	25	x 2 =	50
FAC species	5	x 3 =	15
FACU species	3	x 4 =	12
UPL species	0	x 5 =	0
Column Totals:	33 (A)		77 (B)
Prevalence Index = B/A =			2.33

Hydrophytic Vegetation Indicators:
X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Little to no harvested soybean stalk remnants.

SOIL

Sampling Point: DMS-W05-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as predominantly hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Geomorphic position not applicable, point taken near drainage ditch in drain tiled field.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Des Moines C-Line South Loop Uprate | City/County: Dallas County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: RES-SP01
Investigator(s): JL CP | Section, Township, Range: S01, T080N, R026W
Landform (hillside, terrace, etc.): Hillside | Local relief (concave, convex, none): Convex
Slope (%): 18-20 | Lat: 41.773116 | Long: -93.815057 | Datum: WGS84
Soil Map Unit Name: Clarion loam, Bemis moraine, 6 to 10 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Point taken on top of hill.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1. *Juniperus virginiana*	5	Yes	FACU
2. *Morus alba*	3	Yes	FAC
3.			
4.			
5.			
	8	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Bromus inermis*	80	Yes	FACU
2. *Elymus repens*	10	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	3	x 3 =	9
FACU species	95	x 4 =	380
UPL species	0	x 5 =	0
Column Totals:	98 (A)		389 (B)
Prevalence Index = B/A =			3.97

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: RES-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

No soil pit taken due to the possibility of buried utilities. Powerline overhead. Soils assumed non-hydric based on a non-hydric mapped rating by the NRCS and a lack of hydrophytic vegetation and wetland hydrology.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Appendix D – Site Photographs

Photo 1. View from wetland point DMS-W01-1w, photo taken facing west.

Photo 2. View from upland point DMS-W01/W02-1u, photo taken facing north.

Photo 3. View from wetland point DMS-W02-1w, photo taken facing north.

Photo 4. View from upland point DMS-W01/W02-1u, photo taken facing south.

Photo 5. View from wetland point DMS-W03-1w, point taken facing east.

Photo 6. View from upland point DMS-W03-1u, point taken facing south.

Photo 7. View from wetland point DMS-W04-1w, photo taken facing west.

Photo 8. View from upland point DMS-W04-1u, photo taken facing south.

Photo 9. View from wetland point DMS-W05-1w, photo taken facing west.

Photo 10. View from upland point DMS-W05-1u, photo taken facing south.

Photo 11. View of waterway DMS-S01, photo taken facing west.

Photo 12. View of waterway DMS-S02, photo taken facing west.

Photo 13. View of waterway DMS-S03, photo taken facing south.

Photo 14. View of waterway DMS-S04, photo taken facing north.

Photo 15. View of waterway DMS-S05, photo taken facing southwest.

Photo 16. View of waterway DMS-S06, photo taken facing north.

Photo 17. General view of harvested soy field, photo taken facing north.

Photo 18. General view of harvested corn field, photo taken facing northeast.

Photo 19. General view of maintained ROW, photo taken facing east.

Photo 20. General view of grassland swale, photo taken facing south.

Photo 21. General view of upland forest, photo taken facing west.

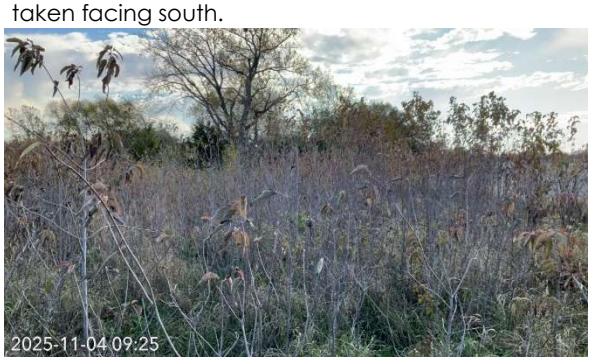


Photo 22. General view of old field, photo taken facing east.

Photo 23. General view of an existing Northern Natural Gas facility, photo taken facing west.

Photo 24. General view of the edge of a ravine, photo taken facing west.

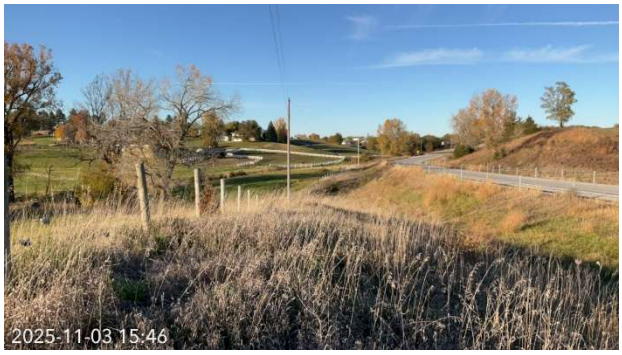


Photo 1. View from sample point RES-SP01, photo taken facing north.

Photo 2. View from sample point RES-SP01, photo taken facing south.

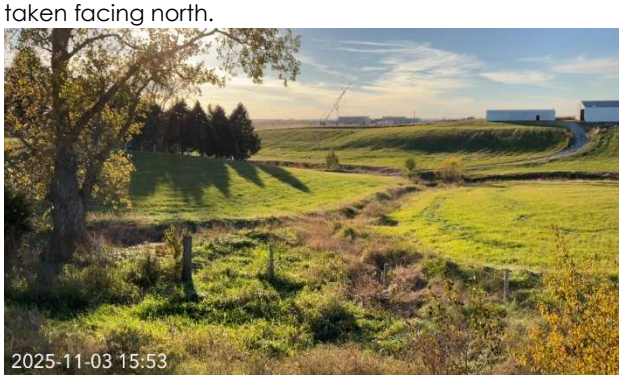


Photo 3. General view of pasture at the Royal Estates compressor station ESB, photo taken facing west.

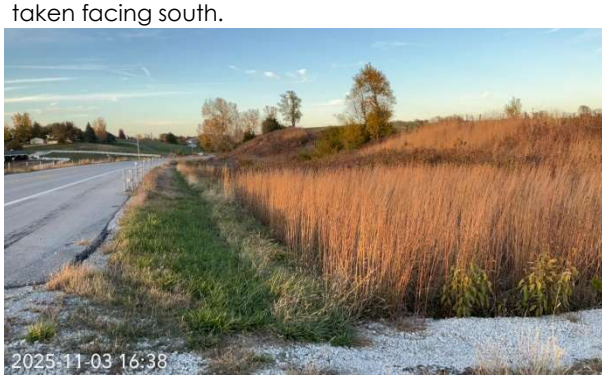


Photo 4. General view of maintained rights-of-way (ROW) within the Royal Estates compressor station ESB, photo taken facing north.

Photo 5. General view of maintained lawn within the Royal Estates compressor station ESB, photo taken facing south.

Photo 6. General view of maintained ROW within the Royal Estates compressor station ESB, photo taken facing south.

Photo 7. General view of the Northern facility within the Royal Estates compressor station ESB, photo taken facing east.

Photo 8. Overview of wetland DAL-W01 within the Des Moines A-line launcher facility, photo taken facing northeast.

Photo 9. General view of the Northern facility within the Des Moines A-line launcher facility, photo taken facing northeast.

Photo 10. General view of maintained ROW within the Des Moines A-line launcher facility, photo taken facing south.

Clarion Compressor Station

Wetland Delineation Report

Central Mainline Corridor
Expansion Project – Clarion
Compressor Station
Wright County, Iowa
Stantec Project #: 172609221

Prepared for:

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Sign-off Sheet

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Prepared by
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Susan Knabe, Senior Principal

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1.0 INTRODUCTION

Stantec understands that Northern Natural Gas (Northern) is regulated by the Federal Energy Regulatory Commission (FERC) and is responsible to comply with the Clean Water Act and with applicable state and local wetland regulations. Both the United States (U.S.) Army Corps of Engineers (USACE) and Iowa Department of Natural Resources (IDNR) have regulatory authority over wetlands, navigable waters, and adjacent lands. Northern is required to review proposed actions and determine whether such actions may affect a waterbody or wetland under the jurisdiction of the IDNR or the USACE. Northern secured the services of Stantec Consulting Services Inc. (Stantec) to conduct an evaluation for the proposed Central Mainline Corridor Expansion Project – Clarion compressor station (Project).

The Environmental Survey Boundary (ESB) for the Project is approximately 96.42 acres in size and located in Section 22 and 27, Township 92 North, Range 25 West, Wright County, Iowa (Appendix A, Figure 1). The Project is located on the north and south side of 200th Street approximately 0.5-mile west of the intersection of 200th Street and Keokuk Avenue. The purpose and objective of the wetland determination and delineation was to identify the extent and spatial arrangement of wetlands and waterways. Stantec conducted the field investigation on November 03, 2025.

Wetland and waterways may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the IDNR, and local regulation under jurisdiction of local county, town, city, or village. Stantec recommends this report be submitted to local authorities, the IDNR, and USACE for final jurisdictional review and concurrence, as necessary.

2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), and applicable Regional Supplements to the *Corps of Engineers Wetland Delineation Manual*.

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. Antecedent precipitation was determined prior to the field investigation utilizing the USACE Antecedent Precipitation Tool (USACE 2025a). The tool compares precipitation totals from the three months prior to the date of the field efforts with 30-year normal amounts, calculating a weighted multi-month score and determining the climate conditions (dry, normal, wet).

A review of USDA Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP) aerial imagery and other available aerial imagery was conducted for the ESB to assist in the wetland delineation because farmed areas are present within the ESB with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wetland signatures within the farmed areas. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria.

The presence of mapped poorly and somewhat poorly drained soils, NWI mapping, and topography within the ESB was reviewed in conjunction with an analysis of available aerial imagery for wetland signatures in these areas. For each potential wetland area identified in the aerial imagery review, a sample point was collected during the field investigation. If the sample point met the wetland criteria, then the wetland area was mapped in the field.

The wetland boundary and sampling points were identified and surveyed with an iPad equipped with a Global Navigational Satellite System (GNSS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.

2.2 WATERWAYS

Review of waterway characteristics and determination of navigability and jurisdiction was beyond the scope of the investigation. However, if observed, waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features that may be under federal or state authority were surveyed using a GPS and mapped using GIS software.

3.0 RESULTS

3.1 SITE DESCRIPTION

The ESB for the proposed Clarion compressor station is comprised primarily of active agricultural fields, public road rights-of-way (ROW), and Northern's existing Ogden to Ventura Valve 7 facility. The ESB is located on the north and south side of 200th Street, approximately 0.5-mile west of the intersection of 200th Street and Keokuk Avenue The ESB is relatively level with gently rolling slopes, and is bordered by active agricultural fields, with the City of Clarion approximately 3 miles southeast of the ESB (Appendix A, Figure 1).

NRCS soils present within the ESB and their hydric status are summarized in Table 1 and mapped in Appendix A, Figure 2.

Table 1. Summary of Soils Identified within the ESB

Map Label	Soil Map Unit Name	Drainage Class	Hydric Soil Rating	Hydric Category
507	Canisteo clay loam, 0 to 2 percent slopes	Poorly drained	100	Hydric
95	Harps clay loam, 0 to 2 percent slopes	Poorly drained	100	Hydric
6	Okoboji silty clay loam, 0 to 1 percent slopes	Very poorly drained	100	Hydric
55	Nicollet clay loam, 1 to 3 percent slopes	Somewhat poorly drained	10	Predominantly Non-Hydric
107	Webster clay loam, 0 to 2 percent slopes	Poorly drained	95	Predominantly Hydric
138B	Clarion loam, 2 to 6 percent slopes	Moderately well drained	5	Predominantly Non-Hydric
4	Knoke silty clay loam, 0 to 1 percent slopes	Very poorly drained	100	Hydric

The National Wetland Inventory (NWI) map identified no wetland or riverine features within the ESB (Appendix A, Figure 3).

Precipitation was analyzed using the USACE Antecedent Precipitation Tool (APT) which calculates a three-month rolling precipitation total. Precipitation was considered *normal* prior to the site visit in November 2025, as shown in the precipitation figure in Appendix B and Table 2, below.

Table 2. Antecedent Precipitation (November 2025)

30 Days Ending	< 30% chance (in)	> 30% chance (in)	Observed Precipitation (in)	Wetness Condition Dry, Wet, Normal	Condition Value[1]	Month Weight Value	Product of Previous 2 Columns
11-03-2025	1.52	2.91	2.60	Normal	2	3	6
10-04-2025	2.20	3.44	2.06	Dry	1	2	2
09-04-2025	2.42	5.25	3.86	Normal	2	1	2
Conclusions[2]	**Prior period has been *normal***					**Sum**	**10**

Source: Precipitation data was compiled and analyzed using the USACE Antecedent Precipitation Tool available at: https://www.epa.gov/wotus/antecedent-precipitation-tool-apt (accessed November 2025).
[1] Condition Values are as follows: Dry=1, Normal=2, Wet=3
[2] Conclusions are as follows: If the sum is 6-9 than the period has been drier than normal; if the sum is 10-14 then that period has been normal; if the sum is 15-18 then the period has been wetter than normal.

3.2 WETLANDS

Ten wetlands were identified and delineated within the ESB during the 2025 field investigation. All of the delineated wetlands appear be isolated and lack a continuous surface connection to any downstream jurisdictional waters. Wetland determination data forms were completed for sample points along transects through the wetlands and adjacent uplands and are contained in Appendix C. Photographs of the wetland communities are contained in Appendix D. The wetland boundary and sample point locations are shown on Appendix A, Figure 4. The wetlands are summarized in Table 3 and described in detail in the following sections.

Table 3. Summary of Wetlands Identified within the ESB

Wetland ID	Wetland Classification		Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39		
CCS-W01	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	7.72
CCS-W02	Seasonally Flooded Basin/Farmed Wetland	PEM1Adf Type 1	No	0.15
CCS-W03	Seasonally Flooded Basin/Farmed Wetland	PEM1Adf Type 1	No	1.26

Wetland ID	Wetland Classification		Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39		
CCS-W04	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	0.49
CCS-W05	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	0.98
CCS-W06	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	1.3
CCS-W07	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	0.32
CCS-W08	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	0.17
CCS-W09	Seasonally Flooded Basin/Farmed Wetland	PEM1Af Type 1	No	0.19
CCS-W10	Seasonally Flooded Basin/Farmed Wetland	PEM1Adf Type 1	No	0.42

Palustrine Emergent Wetlands (Seasonally Flooded Basin/Farmed Wetland)

Palustrine emergent (PEM) wetlands identified onsite were characterized as seasonally flooded basins/farmed wetlands which usually lack standing water throughout most of the growing season but are covered with water or waterlogged within a few inches of the surface during variable seasonal periods. Due to seasonally flooded wetlands remaining dry for much of the year these wetlands are often farmed. In the case of a farmed wetland, soil and vegetation are often considered disturbed due to plowing or tilling practices and the replacement of natural hydrophytic vegetation with cultivated crops. Seasonally flooded basins will fill shallow basins and support vegetation types such as grasses, sedges, and annual plants; or the vegetation is disturbed with cultivated crops and herbicide treatment.

Vegetation, when present within the seasonally flooded basin/farmed wetland communities, included rough-fruited waterhemp (Amaranthus tuberculatus), fall panic grass (*Panicum dichotomiflorum*), curly dock (*Rumex crispus*), and stunted or stressed row crops such as corn (*Zea mays*) or soybean (*Glycine max*). Wetland hydrology indicators observed within these wetlands consisted of Saturation Visible on Aerial Imagery (C9), Stunted or Stressed Plants (D1), and a positive FAC-Neutral Test (D5). Hydric soil indicators identified at the wetland sample points included Thick Dark Surface (A12) and Other. The hydric soil indicator "Other" is an assumed hydric soil indicator based on the top 24 inches of the soil sample consisting of a dark matrix color in an area mapped as hydric by the NRCS.

3.3 UPLAND

Uplands consisted of active agricultural fields, public road ROW, and Northerns existing Ogden to Ventura Valve 7 facility. Dominant plant species identified in the upland herb layer were smooth brome (*Bromus inermis*), yellow foxtail (*Setaria pumila*), common purslane (*Portulaca oleracea*),

and cultivated species such as corn and soybean. No tree or shrub layer species were present in the ESB at the time of the field survey.

Soils in each upland area are mapped by the NRCS and depicted on Appendix A, Figure 2, and are also listed on the data sheets found in Appendix C. Typically, indicators of hydric soils were not observed within upland soil samples. Occasionally, soils met hydric soil indicator Thick Dark Surface (A12) or Other, often just outside of wetland boundaries or in depressions within agricultural fields. When hydric soils were met in an upland, wetland hydrology or hydrophytic vegetation criteria were not met.

No primary indicators of hydrology were observed in the upland areas, and the uplands were found at similar or higher elevations than the wetland.

3.4 WATERWAYS

No waterways or waterbodies were identified within the ESB during the November 2025 field survey.

3.5 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways within the ESB. However, there may be other regulated environmental features within the ESB, including, but not limited to, historical or archeological features, endangered or threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or restrict land uses within or in close proximity to these features. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

4.0 CONCLUSION

Stantec performed a wetland and waterway determination and delineation of the Central Mainline Corridor Expansion Project – Clarion compressor station ESB on behalf of Northern. The purpose and objective were to identify the extent and spatial arrangement of wetlands and waterways within the ESB.

On November 03, 2025, Stantec identified ten PEM wetlands totaling 13.00 acres within the ESB. No waterways or waterbodies were observed within the ESB. The ESB consisted of active agricultural fields, public road ROW, and Northern's existing Ogden to Ventura Valve 7 facility.

The wetlands identified for this report may be subject to federal regulation under the jurisdiction of USACE, state regulation under the jurisdiction of the IDNR and local regulation under jurisdiction of the local, county, town, city, or village. Stantec recommends this report be submitted to local authorities, the IDNR, and USACE for final jurisdictional review and approvals as necessary.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that Northern obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed work to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present in the ESB at the time of the fieldwork. The delineation was performed by experienced and qualified professionals using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE, and in some cases, the IDNR or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the ESB can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the ESB.

5.0 REFERENCES

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Appendix A – Figures

Figure 1. Project Location and Topography

Figure 2. NRCS Soils Survey Data - Hydric Ratings

Figure 3. National Wetland Inventory and National Hydrography Dataset

Figure 4. Field Collected Data

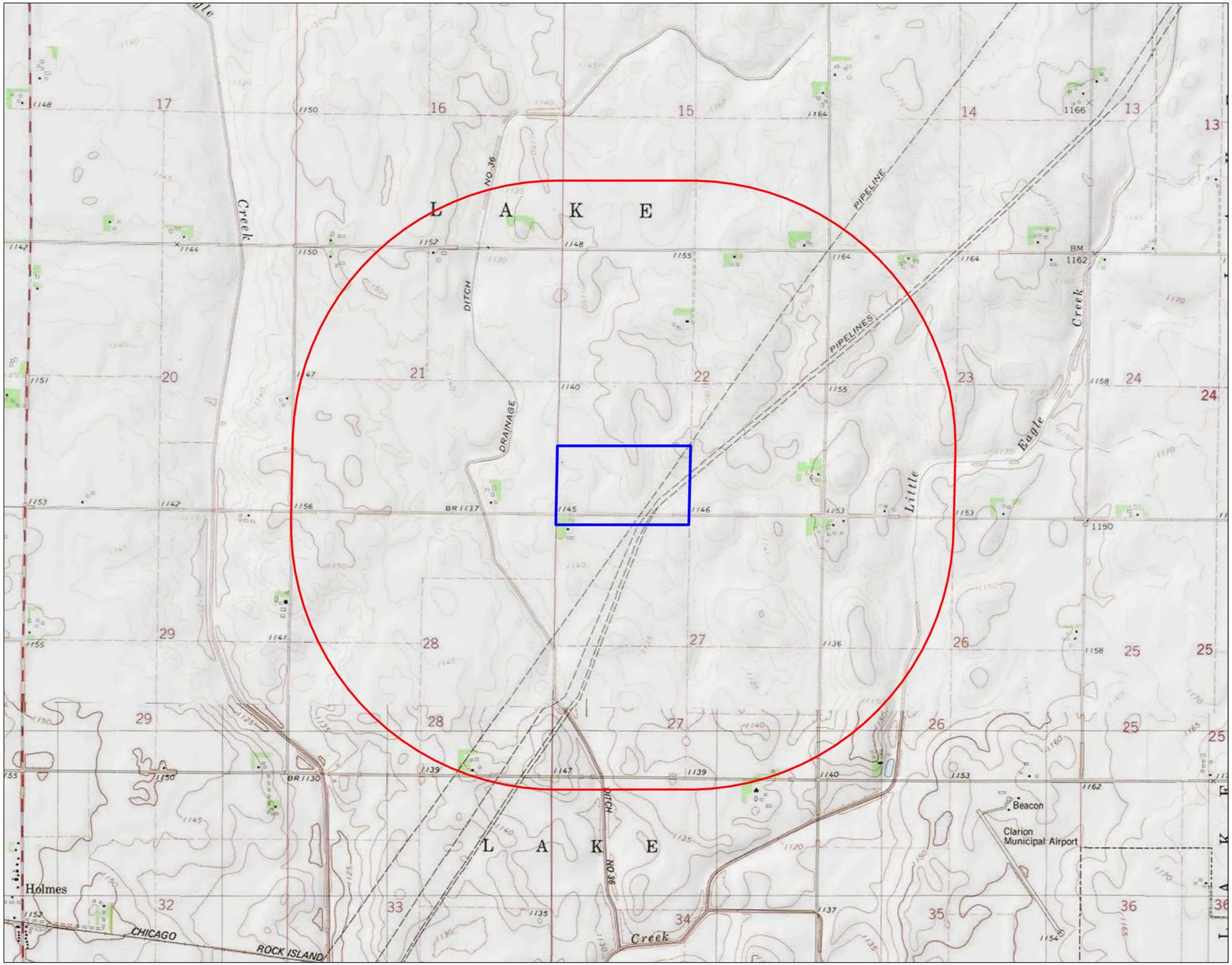


Figure No.

1

Title

Project Location & 1-Mile Buffer
Clarion Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

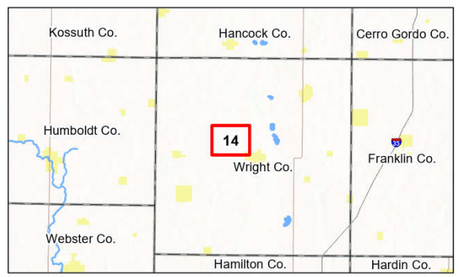
Project Location
Township of Lake
Wright County, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 1,000 2,000 Feet
(At original document size of 11x17)
1:24,000

Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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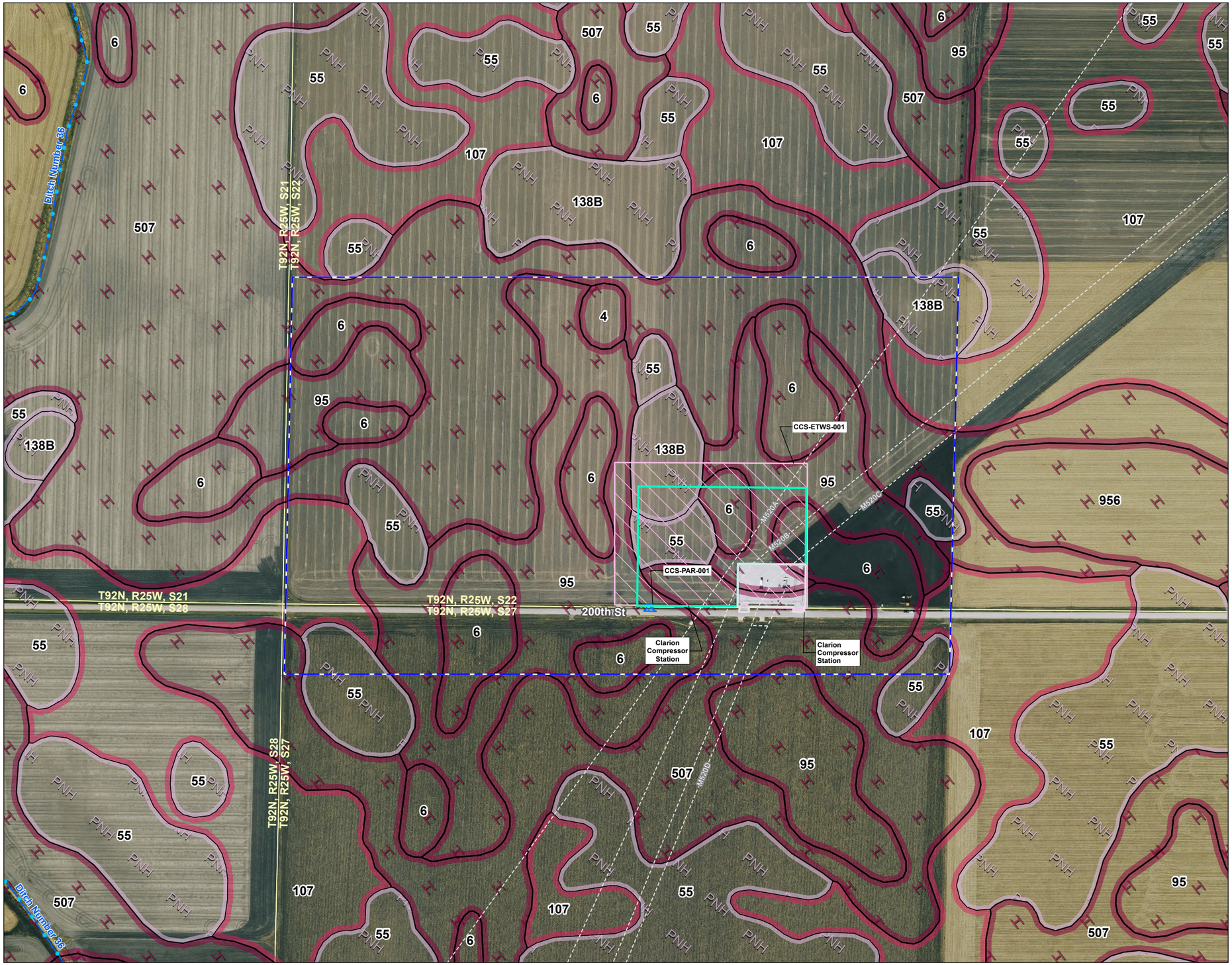


Figure No.

2

Title

NRCS Soil Survey Data
Clarion Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Lake
Wright County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Extra Temporary Workspace

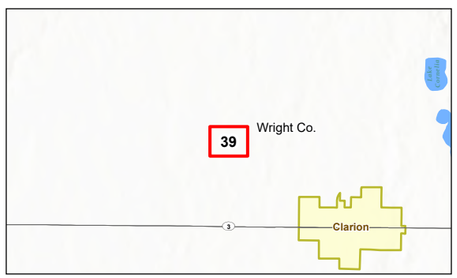
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Clarion Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Lake
Wright County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet

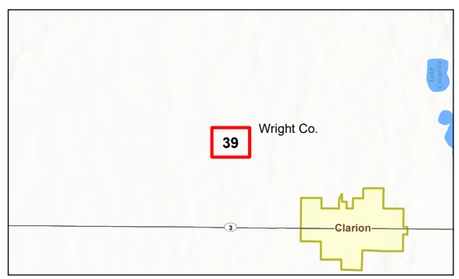
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Extra Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Clarion Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Lake
Wright County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

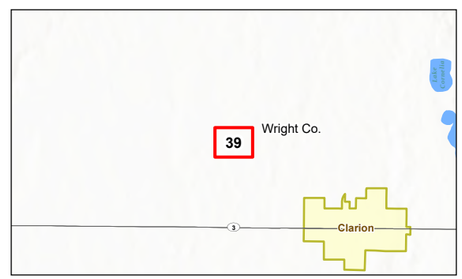
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Existing Facility
- Proposed Facility
- Permanent Access Road
- Extra Temporary Workspace
- Culvert
- Sample Point
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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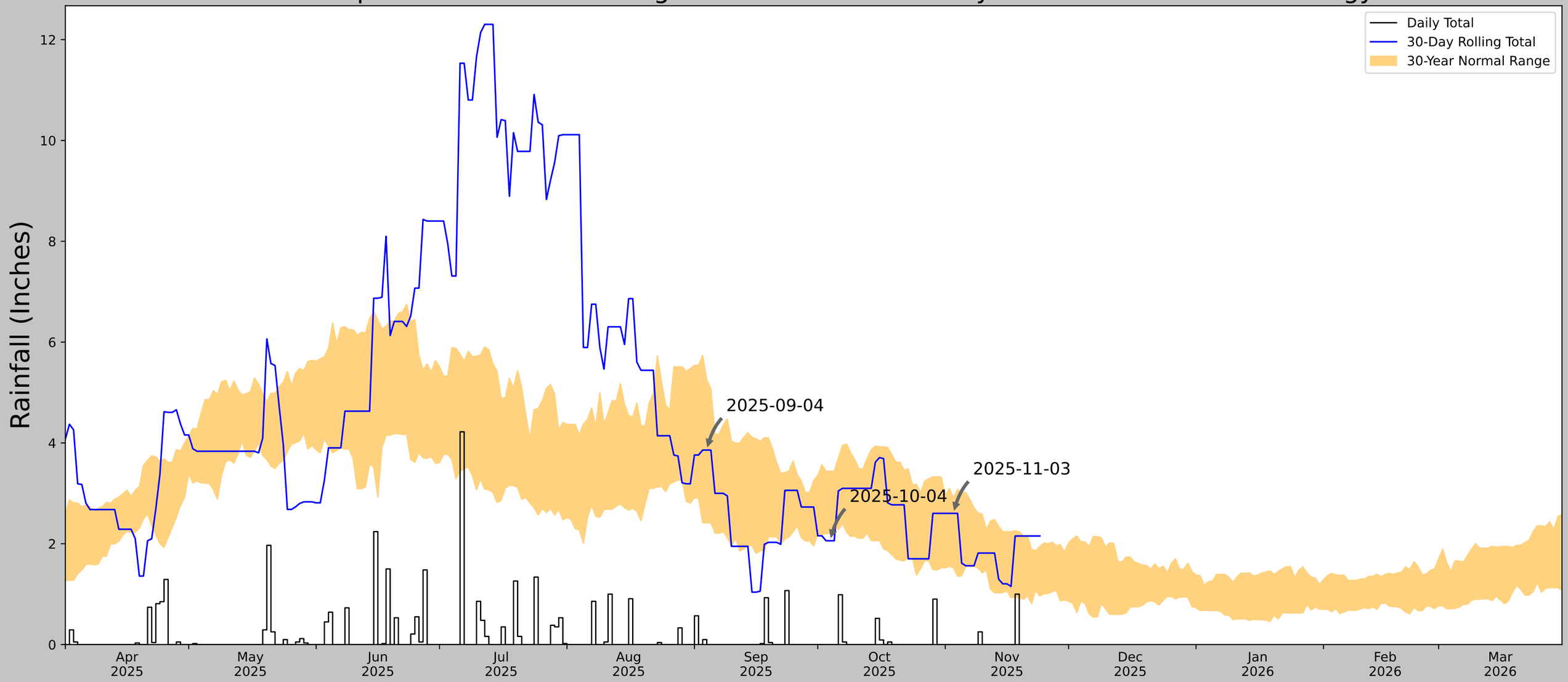
Appendix B – Antecedent Precipitation

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	42.76248, -93.7893
Observation Date	2025-11-03
Elevation (ft)	1142.165
Drought Index (PDSI)	Moderate wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-03	1.52126	2.906299	2.602362	Normal	2	3	6
2025-10-04	2.203937	3.439764	2.059055	Dry	1	2	2
2025-09-04	2.416536	5.252756	3.858268	Normal	2	1	2
Result							Normal Conditions - 10

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
WEBSTER CITY	42.4686, -93.7975	1071.85	20.309	70.315	10.567	11225	87
WEBSTER CITY 0.5 NW	42.4675, -93.824	1060.039	1.353	11.811	0.625	18	3
EAGLE GROVE 1.3 WSW	42.6585, -93.9244	1119.095	14.624	47.245	7.272	3	0
WILLIAMS	42.4875, -93.5414	1189.961	13.116	118.111	7.451	103	0
FORT DODGE 1.6 ENE	42.5193, -94.1504	1116.142	18.317	44.292	9.054	1	0
CLARION	42.72, -93.7336	1155.84	17.672	83.99	9.437	3	0

Appendix C – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-SP01

Investigator(s): JL CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 2-3 Lat: 42.764221 Long: -93.791758 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field. Soybean residue is similar to the rest of the field (no evidence of stunted/stressed crops).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested soybean. Vegetation assumed non hydric based on similar soy residue to remainder of field and lack of wetland hydrology.

SOIL

Sampling Point: CCS-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	
24-28	5Y 5/2	98	7.5YR 5/8	2	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-SP02

Investigator(s): JP MG Section, Township, Range: S27, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.760415 Long: -93.790102 Datum: WGS84

Soil Map Unit Name: Harps clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in harvested corn field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn field, no natural vegetation present. Vegetation assumed non-hydric based on lack of stunted/stressed crop evidence, hydric soils, and wetland hydrology.

SOIL

Sampling Point: CCS-SP02

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/1	100					Clay Loam	
8-14	10YR 3/1	100					Clay Loam	
14-24	10YR 5/2	96	2.5Y 5/6	4	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable - field drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-SP03
Investigator(s): JP MG | Section, Township, Range: S27, T092N, R025W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-2 | Lat: 42.760377 | Long: -93.791126 | Datum: WGS84
Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field with an adjacent drain tile inlet.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested corn field. No natural vegetation. Vegetation assumed non-hydric based on lack of stunted/stressed crop evidence and wetland hydrology.

SOIL

Sampling Point: CCS-SP03

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS and is sampled within a disturbed active agricultural row crop setting.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-SP04

Investigator(s): JP MG Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.761173 Long: -93.793392 Datum: WGS84

Soil Map Unit Name: Webster clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean field, no natural vegetation. Vegetation assumed non-hydric based on lack of stunted/stressed crop evidence, hydric soils, and wetland hydrology.

SOIL

Sampling Point: CCS-SP04

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-11	10YR 2/1	100					Silty Clay Loam	
11-18	10YR 3/1	100					Silty Clay Loam	
18-24	5Y 5/1	98	5Y 5/6	2	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-SP05

Investigator(s): JL,CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Dip Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 42.762822 Long: -93.7914 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Point taken in harvested soybean field. Less soybean remnants than remainder of field but vegetation assumed non- hydric based on a lack of hydric soils.

SOIL

Sampling Point: CCS-SP05

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 2/1	100					Clay Loam	
6-8	10YR 3/1	100					Clay Loam	
8-24	10YR 4/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:
Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W01-1u

Investigator(s): JL CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 2-3 Lat: 42.760888 Long: -93.786159 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field. Field has not yet been tilled.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. New soybean sprouts present. Vegetation assumed non-hydric based on no change in soybean stalk density from rest of field and new healthy sprouts.

SOIL

Sampling Point: CCS-W01-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					Clay Loam	
18-24	10YR 5/1	98	7.5YR 5/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W01-1w
Investigator(s): CP, JL | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-1 | Lat: 42.761012 | Long: -93.786162 | Datum: WGS84
Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field, however little to no soybean remnants is present within the wetland area. Assumed to be stunted/stressed crops.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Amaranthus tuberculatus*	40	Yes	OBL
2. *Panicum dichotomiflorum*	10	No	FACW
3. *Portulaca oleracea*	5	No	FACU
4. *Euphorbia maculata*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	60	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	60 (A)		100 (B)

Prevalence Index = B/A = 1.67

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Little to no soybean remnants within wetland area.

SOIL

Sampling Point: CCS-W01-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100					Clay Loam	
16-24	10YR 5/2	98	7.5YR 5/8	2	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W02-1u

Investigator(s): CP JL Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 1-2 Lat: 42.761766 Long: -93.787662 Datum: WGS84

Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in harvested soybean field

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Taraxacum officinale*	2	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	2	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean. No evidence of crop stunting/stress.

SOIL

Sampling Point: CCS-W02-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	
24-26	10YR 4/1	98	7.5YR 5/8	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W02-1w
Investigator(s): JL CP | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Dip | Local relief (concave, convex, none): Concave
Slope (%): 0 | Lat: 42.761755 | Long: -93.787511 | Datum: WGS84
Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field. Soybean did not grow in wetland area (evidence of stunted/stressed crops).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Amaranthus tuberculatus*	15	Yes	OBL
2. *Taraxacum officinale*	2	No	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	17	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	2	x 4 =	8
UPL species	0	x 5 =	0
Column Totals:	17 (A)		23 (B)

Prevalence Index = B/A = 1.35

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Field is harvested. No soybean residue in wetland area.

SOIL

Sampling Point: CCS-W02-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	
24-26	5Y 5/2	98	7.5YR 5/8	2	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Tractor ruts present in wetland area. Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W03/W04-1u
Investigator(s): JP MG | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Talf | Local relief (concave, convex, none): Linear
Slope (%): 0 | Lat: 42.761287 | Long: -93.789568 | Datum: WGS84
Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean field, no volunteer vegetation. Vegetation assumed non-hydric based on a lack of hydric soils and wetland hydrology.

SOIL

Sampling Point: CCS-W03/W04-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100					Silty Clay Loam	
16-19	10YR 3/1	100					Silty Clay Loam	
19-24	5Y 4/2	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W03-1w
Investigator(s): JP MG | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-2 | Lat: 42.7612 | Long: -93.789448 | Datum: WGS84
Soil Map Unit Name: Harps clay loam, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Amaranthus tuberculatus*	25	Yes	OBL
2. *Euphorbia maculata*	7	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	32	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	7	x 4 =	28
UPL species	0	x 5 =	0
Column Totals:	32 (A)		53 (B)

Prevalence Index = B/A = 1.66

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Evidence of stunted/stressed soybean.

SOIL

Sampling Point: CCS-W03-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					Silty Clay Loam	
18-24	5Y 5/1	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Slight depression. Geomorphic position not applicable due to drain tile.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W04-1w
Investigator(s): JP MG | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Linear
Slope (%): 0-2 | Lat: 42.761447 | Long: -93.789803 | Datum: WGS84
Soil Map Unit Name: Harps clay loam, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field, evidence of crop stress present.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1. *Rumex crispus*	2	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	2	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	2	x 3 =	6
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	2 (A)		6 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean. Soybean stalk density less than field outside of wetland area.

SOIL

Sampling Point: CCS-W04-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-17	10YR 2/1	100					Silty Clay Loam	
17-24	2.5Y 5/2	98	7.5YR 4/6	2	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W05-1u

Investigator(s): JL,CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Footslope Local relief (concave, convex, none): Convex

Slope (%): 0-1 Lat: 42.763731 Long: -93.789268 Datum: WGS84

Soil Map Unit Name: Knoke silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X
Hydric Soil Present?	Yes X	No ____
Wetland Hydrology Present?	Yes ____	No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in soybean field, healthy soybean evidence present at sampled area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean no volunteer vegetation present. Vegetation assumed non-hydric based on lack of evidence of crop stunting/stress and wetland hydrology.

SOIL

Sampling Point: CCS-W05-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0–24	10YR 2/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W05-1w

Investigator(s): CP, JL Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 42.763696 Long: -93.789482 Datum: WGS84

Soil Map Unit Name: Knoke silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field. No soybean grew in wetland area (no soybean harvest remnants compared to rest of the field).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Amaranthus tuberculatus*	20	Yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	20 (A)		20 (B)

Prevalence Index = B/A = 1

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
No soybean grew in wetland, no harvest residue present.

SOIL

Sampling Point: CCS-W05-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/1	100					Clay Loam	
16-24	5Y 5/2	98	10YR 5/8	2	C	M	Sandy Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W06-1u

Investigator(s): JP MG Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-2 Lat: 42.761216 Long: -93.790636 Datum: WGS84

Soil Map Unit Name: Harps clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean field. No volunteer vegetation. Vegetation assumed non-hydric based on a lack of wetland hydrology and evidence of stunting/stressed crops.

SOIL

Sampling Point: CCS-W06-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-21	10YR 2/1	100					Silty Clay Loam	
21-24	5Y 4/2	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W06-1w
Investigator(s): JP MG | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-2 | Lat: 42.761163 | Long: -93.79081 | Datum: WGS84
Soil Map Unit Name: Harps clay loam, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field with evidence of stunted/stressed crops.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Amaranthus tuberculatus*	30	Yes	OBL
2. *Portulaca oleracea*	15	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	45	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	45 (A)		90 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Stunted/stressed evidence in harvested soybean.

SOIL

Sampling Point: CCS-W06-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-20	10YR 2/1	100					Silty Clay Loam	
20-24	5Y 5/2	98	7.5YR 4/6	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W07/W08-1u
Investigator(s): JL CP | Section, Township, Range: S22, T092N, R025W
Landform (hillside, terrace, etc.): Talf | Local relief (concave, convex, none): Linear
Slope (%): 0-1 | Lat: 42.763153 | Long: -93.791968 | Datum: WGS84
Soil Map Unit Name: Canisteo clay loam, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)
No volunteer vegetation. Harvested soybean.

SOIL

Sampling Point: CCS-W07/W08-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-22	10YR 2/1	100					Clay Loam	
22-26	5Y 5/2	98	7.5YR 5/8	2	C	M	Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W07-1w

Investigator(s): JL CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 42.763505 Long: -93.792184 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field, soil residue density less than remainder of field (evidence of crop stress).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation assumed hydric based on stunted crops (little to no soybean residue in wetland area compared to the rest of the field).

SOIL

Sampling Point: CCS-W07-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-22	10YR 2/1	10					Clay Loam	
22-28	10YR 3/1	99	7.5YR 5/8	1	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS and is sampled within a disturbed active agricultural row crop setting.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W08-1w

Investigator(s): JL CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 42.762907 Long: -93.791889 Datum: WGS84

Soil Map Unit Name: Canisteo clay loam, 0 to 2 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field. Soybean did not grow in wetland no soy residue from harvest (evidence of crop stress).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Point taken in harvested soybean field. Crop stress present based on little to no soybean remnants in the wetland area compared to the rest of the field. Vegetation assumed hydric.

SOIL

Sampling Point: CCS-W08-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-22	10YR 2/1	100					Clay Loam	
22-24	10YR 3/1	100					Clay Loam	
24-26	5Y 5/2	98	7.5YR 5/8	2	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- X Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W09-1u

Investigator(s): JP MG Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Convex

Slope (%): 0-2 Lat: 42.762589 Long: -93.793402 Datum: WGS84

Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested soybean field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Harvested soybean no volunteer vegetation present. Vegetation assumed non-hydric based on a lack of crop stress and wetland hydrology.

SOIL

Sampling Point: CCS-W09-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS and is sampled within a disturbed active agricultural row crop setting.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W09-1w

Investigator(s): JL CP Section, Township, Range: S22, T092N, R025W

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 42.762731 Long: -93.793411 Datum: WGS84

Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested soybean field. Crop stress evidence present: little to no soybean residue in wetland area compared to the remainder of the field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation assumed hydric based on crop stress (little to no harvested soybean residue in wetland area) and the presence of hydric soils and wetland hydrology.

SOIL

Sampling Point: CCS-W09-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS and is sampled within a disturbed active agricultural row crop setting.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Geomorphic position not applicable - field is drain tiled.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station City/County: Wright County Sampling Date: 11/03/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: CCS-W10-1u

Investigator(s): JP MG Section, Township, Range: S27, T092N, R025W

Landform (hillside, terrace, etc.): Backslope Local relief (concave, convex, none): Concave

Slope (%): 0-1 Lat: 42.760461 Long: -93.788789 Datum: WGS84

Soil Map Unit Name: Okoboji silty clay loam, 0 to 1 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in harvested corn field. No evidence of stunting or stress in sampled corn.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0 =Total Cover		

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0 =Total Cover		

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0 =Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: CCS-W10-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-18	10YR 2/1	100					Silty Clay	Dense clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- _X_ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: Clay

Depth (inches): 18

Hydric Soil Present? **Yes** X **No** ____

Remarks:

Soils assumed hydric based on 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS and is sampled within a disturbed active agricultural row crop setting. Dense clay refusal at 18 inches.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Clarion Compressor Station | City/County: Wright County | Sampling Date: 11/03/2025
Applicant/Owner: Northern Natural Gas | State: IA | Sampling Point: CCS-W10-1w
Investigator(s): JP MG | Section, Township, Range: S27, T092N, R025W
Landform (hillside, terrace, etc.): Depression | Local relief (concave, convex, none): Concave
Slope (%): 0-2 | Lat: 42.760537 | Long: -93.789049 | Datum: WGS84
Soil Map Unit Name: Harps clay loam, 0 to 2 percent slopes | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in harvested corn field. Evidence of crop stunting/stress present.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	

Herb Stratum (Plot size: 5 ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	=Total Cover	

Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: NaN (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	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Stunted/stressed harvested corn, no volunteer vegetation present. Vegetation assumed hydric based on the present of hydric soils and wetland hydrology with stunted crops.

SOIL

Sampling Point: CCS-W10-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-24	10YR 2/1	100					Silty Clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Soils assumed hydric based on a 10YR2/1 matrix top layer in an area mapped as hydric by the NRCS and is sampled within a disturbed active agricultural row crop setting.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- X Saturation Visible on Aerial Imagery (C9)
- X Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:
Geomorphic position not applicable - field is drain tiled.

Appendix D – Site Photographs

Photo 1. View from wetland point CCS-W01-1w, photo taken facing north.

Photo 2. View from upland point CCS-W01-1u, photo taken facing east.

Photo 3. View from wetland point CCS-W02-1w, photo taken facing north.

Photo 4. View from upland point CCS-W02-1u, photo taken facing south.

Photo 5. View from wetland point CCS-W03-1w, point taken facing south.

Photo 6. View from upland point CCS-W03/W04-1u, point taken facing east.

Photo 7. View from wetland point CCS-W04-1w, photo taken facing north.

Photo 8. View from wetland point CCS-W05-1w, photo taken facing north.

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Photo 20. View of Northern's existing Ogden to Ventura pipeline valve 7 setting, photo taken facing north.

Beatrice Compressor Station

Palmyra Compressor Station

Wetland Delineation Report

Central Mainline Corridor
Expansion Project – Beatrice
Compressor Station and Palmyra
Compressor Station
Gage and Otoe Counties,
Nebraska
Stantec Project #: 172609221

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Sign-off Sheet

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Reviewed by (signature)

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1.0 INTRODUCTION

Stantec understands that Northern Natural Gas (Northern) is regulated by the Federal Energy Regulatory Commission (FERC) and is responsible to comply with the Clean Water Act and with applicable state and local wetland regulations. Both the United States (U.S.) Army Corps of Engineers (USACE) and Nebraska Department of Water, Energy, and Environment (NDWEE) have regulatory authority over wetlands, navigable waters, and adjacent lands. Northern is required to review proposed actions and determine whether such actions may affect a waterbody or wetland under the jurisdiction of the USACE or NDWEE. Northern secured the services of Stantec Consulting Services Inc. (Stantec) to conduct an evaluation for the proposed Central Mainline Corridor Expansion Project – Beatrice compressor station and Palmyra compressor station (Project).

The Environmental Survey Boundary (ESB) for the Beatrice compressor station is approximately 40.61 acres in size and is located in Gage County, Nebraska (Appendix A, Figure 1). The ESB for the Palmyra compressor station is approximately 53.66 acres in size and is located in Otoe County, Nebraska (Appendix A, Figure 1). The purpose and objective of the wetland determination and delineation were to identify the extent and spatial arrangement of wetlands and waterways within the ESB. The wetland delineations for the Project were completed by Stantec in November 10 and 12, 2025.

Wetland and waterways may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the NDWEE, and local regulation under jurisdiction of the local county, town, city, or village. Stantec recommends this report be submitted to local authorities, the NDWEE and USACE for final jurisdictional review and concurrence, as necessary.

2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), and Midwest Regional Supplement to the *Corps of Engineers Wetland Delineation Manual.*

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, National Hydrography Dataset (NHD) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. Antecedent precipitation was determined prior to the field investigation utilizing the USACE Antecedent Precipitation Tool (APT) (USACE 2025a). The tool compares precipitation totals from the three months prior to the date of the field efforts with 30-year normal amounts, calculating a weighted multi-month score and determining the climate conditions (dry, normal, wet).

A review of USDA Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP) aerial imagery and other available aerial imagery was conducted for the ESB to assist in the wetland delineation because farmed areas are present within the ESB with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wetland signatures within the farmed areas. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria.

The presence of mapped poorly and somewhat poorly drained soils, NWI mapping, and topography within the ESB was reviewed in conjunction with an analysis of available aerial imagery for wetland signatures in these areas. For each potential wetland area identified in the aerial imagery review, a sample point was collected during the field investigation. If the sample point met the wetland criteria, then the wetland area was mapped in the field.

The wetland boundary and sampling points were identified and surveyed with an iPad equipped with a Global Navigational Satellite System (GNSS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.

2.2 WATERWAYS

Observed waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features were mapped and described. Geomorphological characteristics of each waterway were collected at a waterway sample point, including the width and height of top of bank, the width and height of the ordinary high-water mark (OHWM), and channel substrate. The waterway lines, polygons, and sample point locations were surveyed with an iPad equipped with ESRI Field Maps and a GNSS capable of sub-meter accuracy and mapped using GIS software. However, the review of waterway potential for federal jurisdiction was beyond the scope of the investigation.

3.0 RESULTS

3.1 SITE DESCRIPTION

Both ESBs are primarily comprised of a mixture of maintained lawn, open land, roadside rights-of-way (ROW), and existing Northern facilities. Overall, the ESBs are relatively level with shallow slopes and gently rolling hills. Soils present within the ESB, and their hydric status are summarized in Tables 1 and 2. One wetland identified during the field investigations was located primarily within an area mapped as non-hydric soils (Appendix A, Figure 2).

Table 1. Summary of Soils Identified within the Beatrice Compressor Station ESB

Soil Survey of Gage County, NE	Map Unit	Hydric Rating
Malcolm silt loam, 6 to 11 percent slopes, eroded	7258	Non-Hydric
Malmo, eroded-Pawnee complex, 6 to 11 percent slopes	7344	Non-Hydric
Morrill loam, 11 to 17 percent slopes	7419	Non-Hydric
Otoe silty clay loam, 6 to 11 percent slopes, eroded	7464	Non-Hydric
Wymore silty clay loam, 2 to 6 percent slopes	7693	Non-Hydric

Table 2. Summary of Soils Identified within the Palmyra Compressor Station ESB

Soil Survey of Otoe County, NE	Map Unit	Hydric Rating
Wymore silty clay, 3 to 6 percent slopes, eroded	7695	Predominantly Non-Hydric
Nodaway-Colo complex, occasionally flooded	7870	Partially Hydric
Pawnee clay loam, 4 to 8 percent slopes, eroded	7501	Predominantly Non-Hydric

The NWI map identified one riverine wetland community (R4SBC) in the Beatrice compressor station ESB and Palmyra compressor station ESB (Appendix A, Figure 3).

Precipitation was analyzed using the USACE APT tool which calculates a three-month rolling precipitation total (USACE 2025a). Precipitation was considered normal prior to the field

investigation on November 10, 2025, for the Palmyra compressor station ESB, and for the field investigation on November 12, 2025, for the Beatrice compressor station ESB, as shown in the precipitation figures in Appendix B.

3.2 WETLANDS

One wetland was identified and delineated within the Beatrice compressor station ESB during the November 2025 field investigations. Wetland determination data forms were completed for sample points along transects through the wetland and adjacent uplands and are contained in Appendix C. Photographs of the wetland are contained in Appendix D. The wetland boundary and sample point locations are shown on Appendix A, Figure 4. The wetland is summarized in Table 3 and described in detail in the following sections.

Table 3. Summary of Wetlands Identified within the ESB

Wetland ID	Wetland Classification		Federal Jurisdictional Determination[1]	Adjacent Surface Waters	Acreage within the ESB
	Eggers and Reed	Cowardin Circular 39			
BCS-W01	Degraded Wet Meadow	PEM1B Type 2	Potentially Jurisdictional	BCS-S01	0.28

[1]Jurisdictional determination per USACE determination 33 CFR Part 328 on November 13, 1987

Palustrine Emergent Wetlands (Degraded Wet Meadow)

The palustrine emergent (PEM) wetland identified onsite was characterized as a wet meadow wetland community. Wet meadows usually lack standing water throughout most of the growing season but are saturated within a few inches of the surface. Vegetation typically includes grasses, sedges, rushes, and short broad-leaved plants. The wet meadow wetland within the Beatrice compressor station ESB was considered degraded due to a dominance of the invasive species reed canary grass (*Phalaris arundinacea*) and a location alongside abandoned railroad ROW.

Vegetative species documented within the degraded wet meadow wetland included reed canary grass and prairie cordgrass (*Spartina pectinata*). The wetland sample point was observed to meet secondary wetland hydrology indicators Geomorphic Position (D2) and a positive FAC-Neutral Test (D5). Hydric soil indicators observed at the wetland sample point included Depleted Below Dark Surface (A11) and Redox Dark Surface (F6).

No wetlands were identified within the Palmyra compressor station during the November 2025 field investigation.

3.3 UPLAND

Uplands consisted of maintained lawn, open land, roadside ROW, and existing Northern facilities. Dominant plant species identified in the upland herb layer were smooth brome (*Bromus inermis*), yellow foxtail (*Setaria pumila*), Kentucky bluegrass (*Poa pratensis*), quack grass (*Elymus repens*), and big bluestem (*Andropogon gerardii*). The tree and shrub layer consisted of planted bur oaks (*Quercus macrocarpa*) and eastern red cedars (*Juniperus virginiana*).

Soils in each upland area are mapped by the NRCS and depicted on Appendix A, Figure 2, and are also listed on the data sheets found in Appendix C. An upland soil pit was not taken within the Beatrice compressor station due to abandoned utilities. Soils were instead assumed non-hydric based on the NRCS soils mapped rating of non-hydric for the sampled area and a lack of hydrophytic vegetation and wetland hydrology indicators. The upland soil sample at the Palmyra compressor station met hydric soil indicator Redox Dark Surface (F6), however wetland hydrology and hydrophytic vegetation criteria were not met.

No primary indicators of hydrology were observed in the upland areas, and the uplands were found at similar or higher elevations than the wetland.

3.4 WATERWAYS

The 2025 field investigations identified one waterway within the Beatrice compressor station ESB. Characteristics of the waterway are summarized in Table 4 and are depicted on Appendix A, Figure 4.

Table 4. Summary of Waterways Identified within the ESB

Waterway ID	Flow Class	Height of Bank (feet)[1]	Top of Bank Width of Stream (feet)[1]	Water Depth (feet)[1]	Associated Surface Waters	Acreage within the ESB
BCS-S01	Intermittent/ Modified Ditch	1	10	0	BCS-W01	0.06

[1]Waterway bank and depth measurements are approximate

No waterways were identified within the Palmyra compressor station during the November 2025 field investigations.

3.5 WATERBODIES

During the November 2025 field investigations, no waterbodies were identified within the Beatrice compressor station ESB or the Palmyra compressor station ESB.

3.6 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways within the ESB. However, there may be other regulated environmental features within the ESB, including, but not limited to, historical or archeological features, endangered or threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or restrict land uses within or in close proximity to these features. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

4.0 CONCLUSION

Stantec performed a wetland delineation on behalf of Northern for the Central Mainline Corridor Expansion Project – Beatrice compressor station and Palmyra compressor station. The purpose and objective were to identify the extent and spatial arrangement of wetlands and waterways within the ESB.

During the 2025 field investigations, one wetland and one waterway were identified and delineated within the Beatrice compressor station ESB in accordance with state and federal guidelines and were subsequently surveyed with GNSS and mapped using GIS software. There was a combined total of 0.28 acre of wetlands and 0.06 acre of waterways delineated within the ESB. The identified PEM wetland was characterized as a degraded wet meadow wetland community and the waterway was classified as an intermittent stream/modified ditch. Adjacent uplands were primarily composed of a mixture of maintained lawn, open land, roadside rights-of-way (ROW), and existing Northern facilities. No wetlands or waterbodies were identified within the Palmyra compressor station ESB.

Water resources that are considered waters of the U.S.(WOTUS) are subject to regulation under Section 404 of the Clean Water Act and the jurisdictional regulatory authority lies with the USACE as well as the NDWEE.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that Northern obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed project to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present within the ESB at the time of the fieldwork. Experienced and qualified professionals performed the delineation using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE and, in some cases, the NDWEE or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the ESB can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the ESB.

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Appendix A – Figures

Figure 1. Project Location

Figure 2. NRCS Soil Survey Data w/Hydric Rating

Figure 3. National Wetlands Inventory and National Hydrography Dataset

Figure 4. Field Collected Data

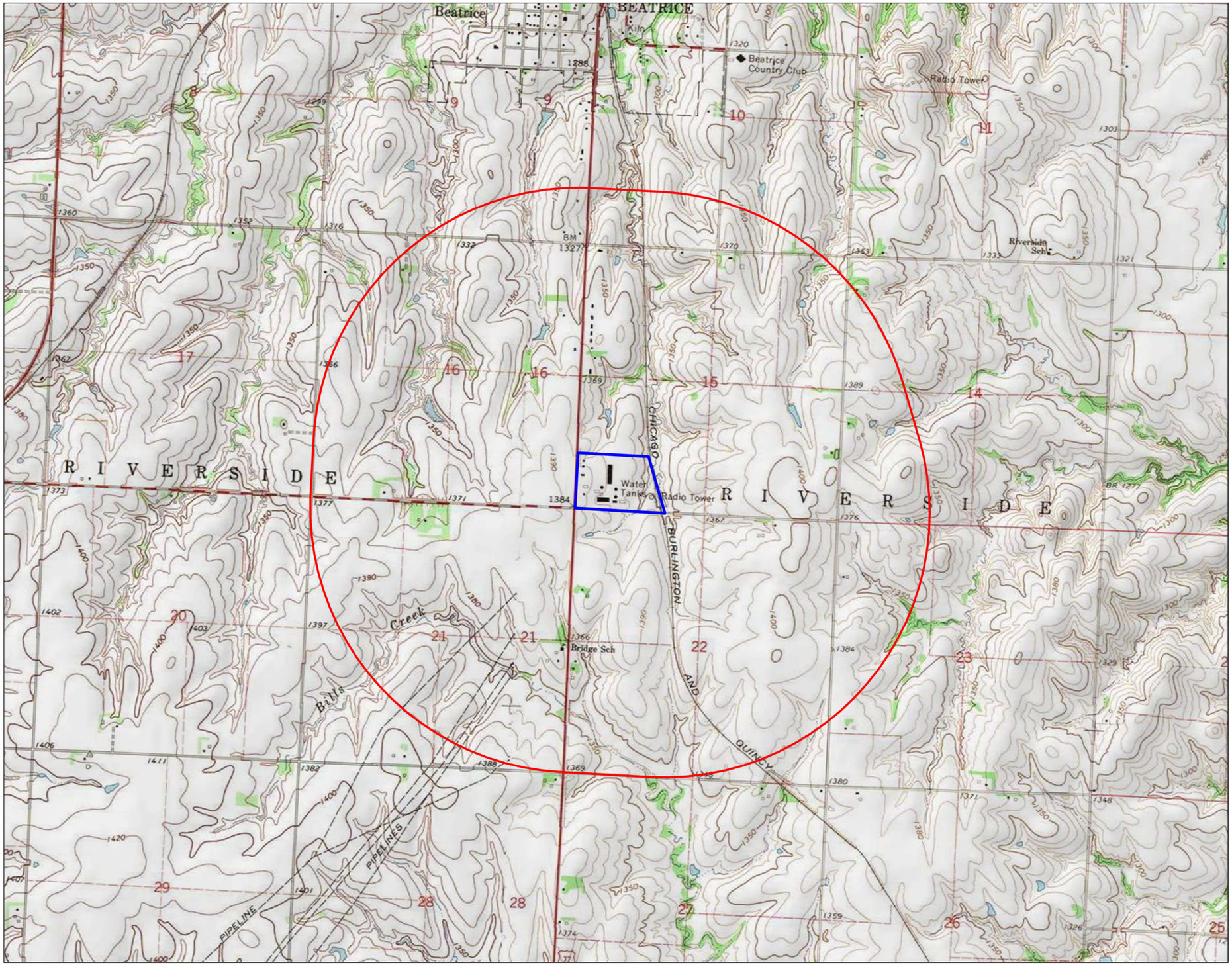

Figure No.

1

Title

Project Location & 1-Mile Buffer
Beatrice Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Riverside
Gage County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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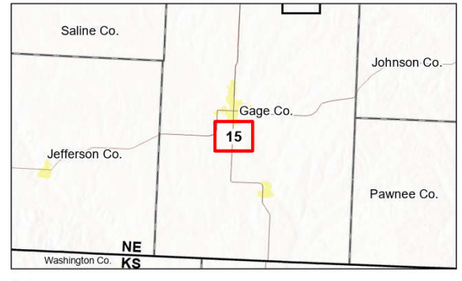
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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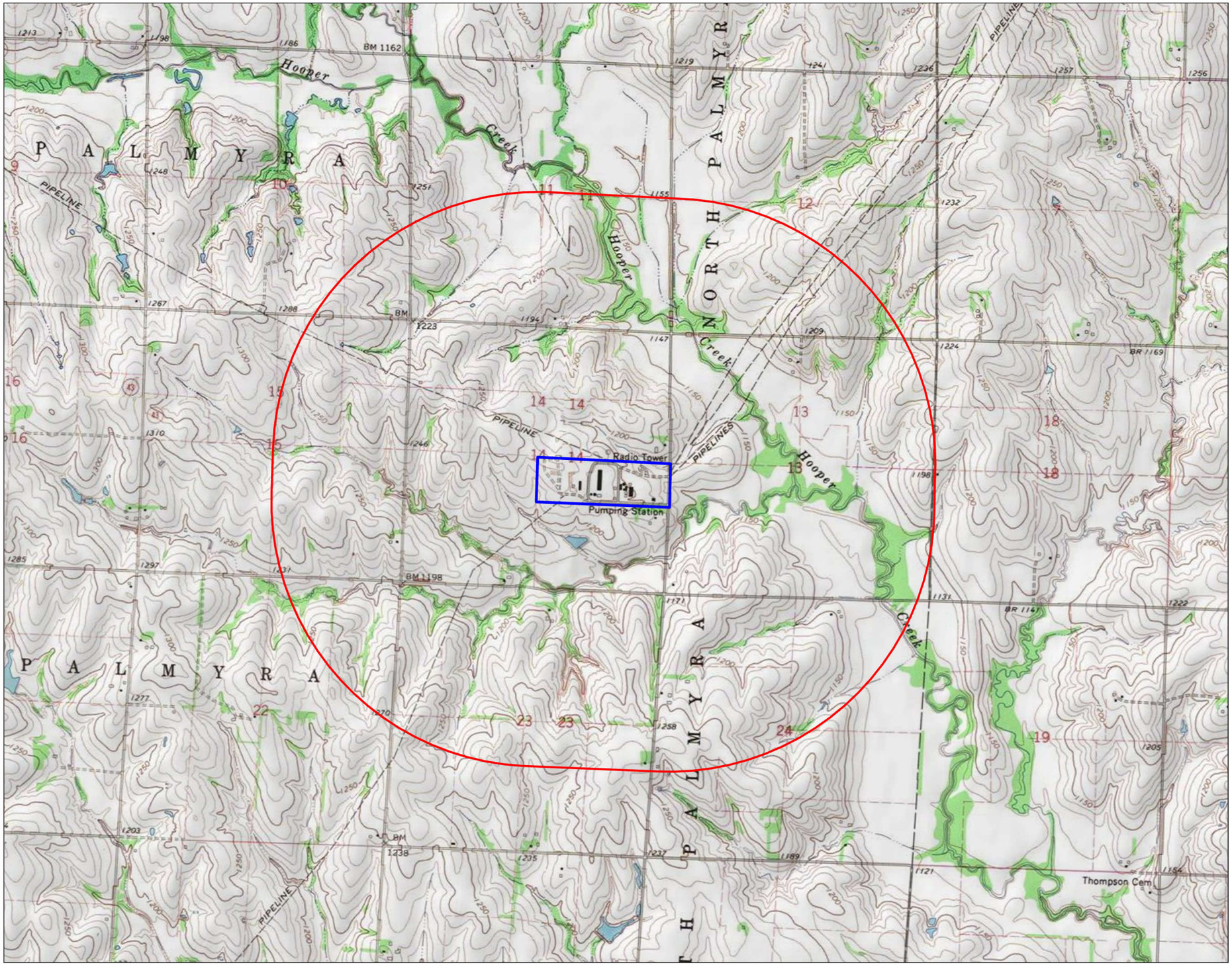

Figure No.

1

Title

Project Location & 1-Mile Buffer
Palmyra Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of North Palmyra
Otoe County, Nebraska

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

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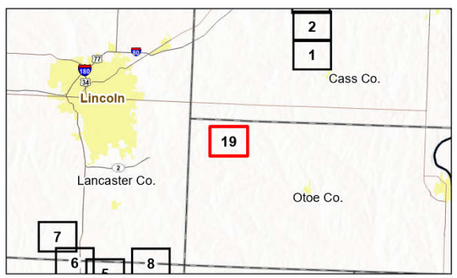
- 1-Mile Buffer



Notes
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Figure No.

2

Title

NRCS Soil Survey Data
Beatrice Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Riverside
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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(At original document size of 11x17)
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Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace

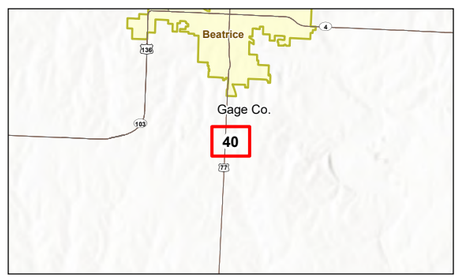
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Palmyra Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of North Palmyra
Otoe County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

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Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace

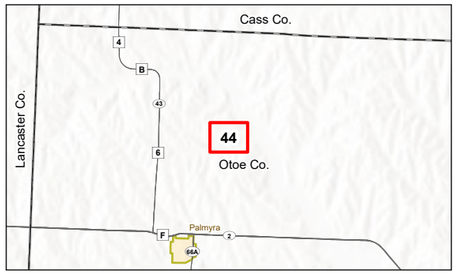
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



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3. Background: NAIP 2022

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Figure No.

3

Title

National Wetlands Inventory
Beatrice Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Riverside
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
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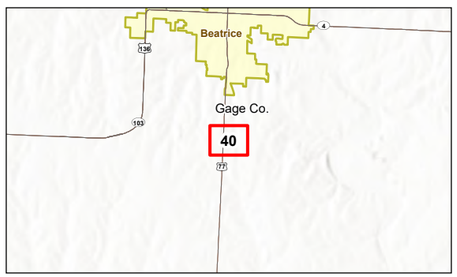
Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes

1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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U:\172611726092211\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

Figure No.

3

Title

National Wetlands Inventory
Palmyra Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of North Palmyra
Otoe County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

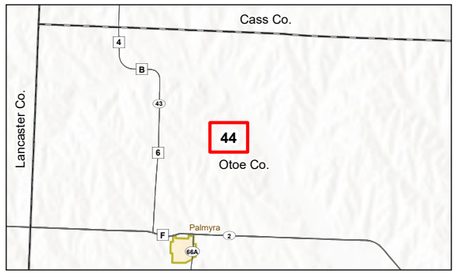
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Beatrice Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Riverside
Gage County, Nebraska

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

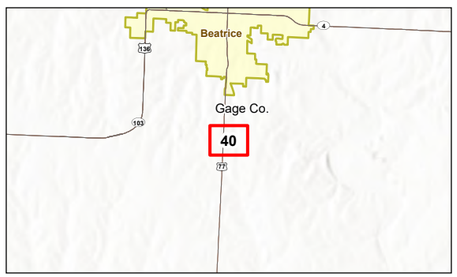
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Wetland

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

Stantec

Northern Natural Gas

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U:\172611726092211103_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

Figure No.
4

Title
Field Collected Data
Palmyra Compressor Station

Client/Project 172609221
Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Precinct of North Palmyra
Otoe County, Nebraska

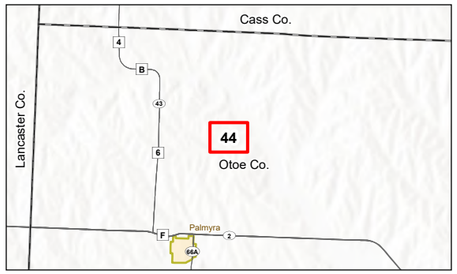
Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend
- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Sample Point
- Upland Drainage Feature

National Hydrography Dataset
- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2022

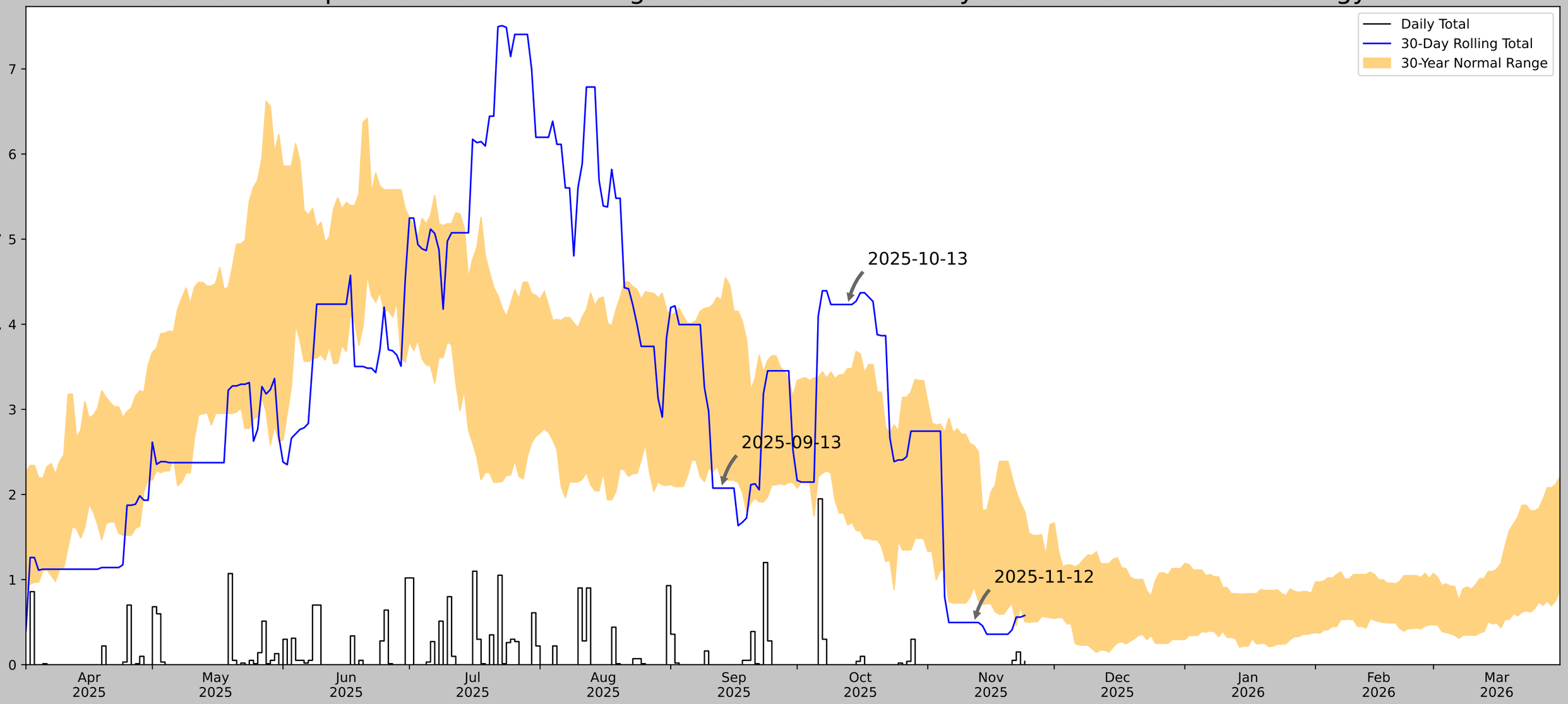
Stantec
Northern Natural Gas

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

U:\172611726092211\03_data\gis_cad\gis\ArcPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-26 By: jmarty

Appendix B – Precipitation Analysis

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.22154, -96.74336
Observation Date	2025-11-12
Elevation (ft)	1366.036
Drought Index (PDSI)	Moderate drought (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-12	0.917323	2.575591	0.496063	Dry	1	3	3
2025-10-13	1.641732	3.479134	4.232284	Wet	3	2	6
2025-09-13	2.188976	4.28504	2.074803	Dry	1	1	1
Result							Normal Conditions - 10

Figures and tables made by the Antecedent Precipitation Tool Version 3.0

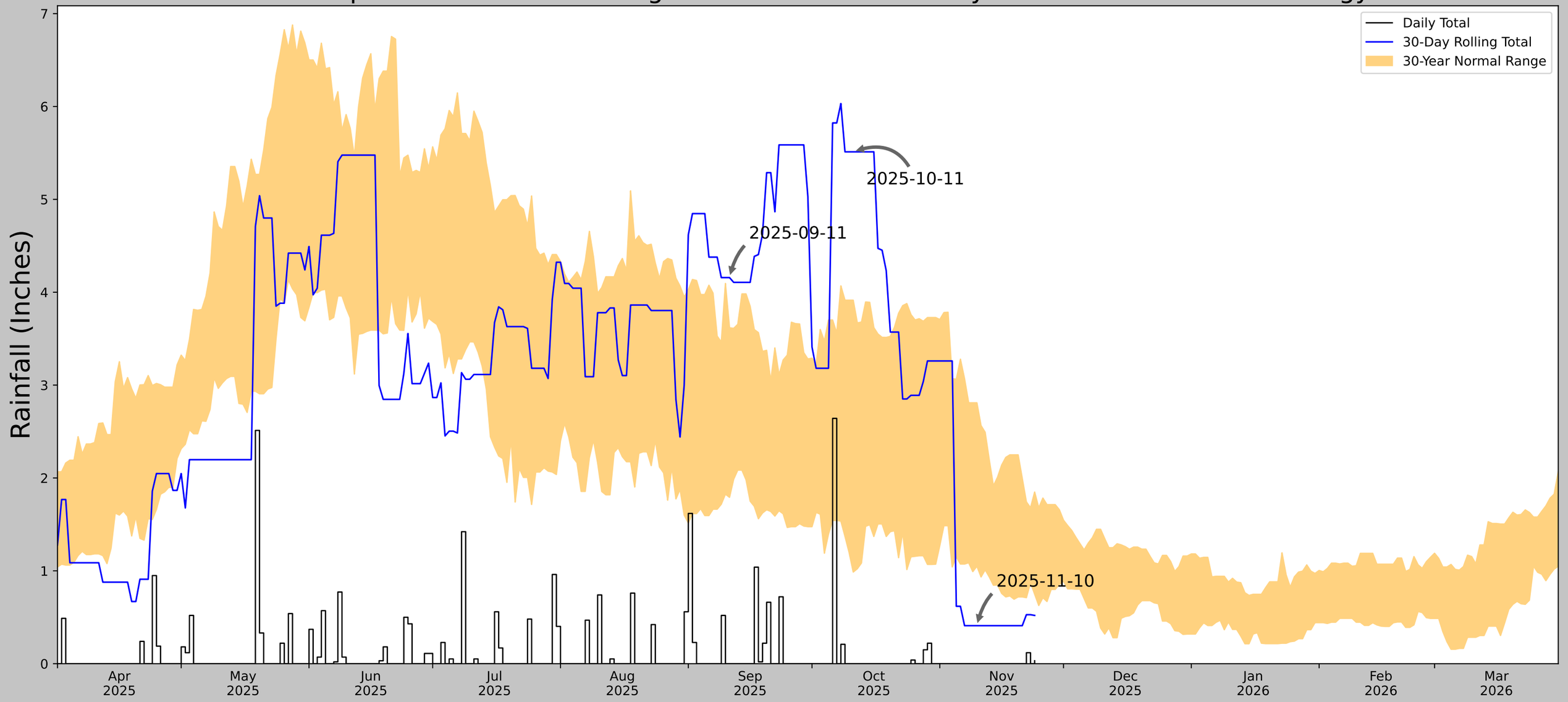
US Army Corps of Engineers.

ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
BEATRICE 1N	40.2994, -96.75	1296.916	5.391	69.12	2.799	11306	84
BEATRICE 1.35 E	40.2704, -96.7228	1306.102	2.464	9.186	1.131	3	1
DEWITT 1.4 SE	40.377, -96.9086	1298.885	9.926	1.969	4.486	12	4
BLUE SPRINGS 3.31 ENE	40.1604, -96.6083	1306.102	12.17	9.186	5.588	0	1
WYMORE	40.1269, -96.6711	1254.921	12.625	41.995	6.211	32	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	40.74633, -96.37184
Observation Date	2025-11-10
Elevation (ft)	1210.663
Drought Index (PDSI)	Moderate drought (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-10	1.049213	2.809449	0.409449	Dry	1	3	3
2025-10-11	0.986614	3.914567	5.511811	Wet	3	2	6
2025-09-11	1.791339	3.617323	4.15748	Wet	3	1	3
Result							Normal Conditions - 12

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
SYRACUSE 2.0 W	40.6564, -96.2243	1122.047	9.916	88.616	5.341	6048	89
SYRACUSE	40.6661, -96.1892	1100.066	1.958	21.981	0.924	5271	1
WEEPING WATER	40.8639, -96.1414	1100.066	14.979	21.981	7.07	34	0

Appendix C – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Beatrice Compressor Station City/County: Gage County Sampling Date: 11/12/2025
Applicant/Owner: Northern Natural Gas State: NE Sampling Point: BCS-W01-1u
Investigator(s): CP, JL Section, Township, Range: S15, T003N, R006E
Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex
Slope (%): 1-3 Lat: 40.221054 Long: -96.740781 Datum: WGS84
Soil Map Unit Name: Morrill loam, 11 to 17 percent slopes NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
No soil pit taken due to old railroad tracks and rocky berm.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	25	Yes	FACU
2.			
3.			
4.			
5.			
	25	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Solidago altissima*	25	Yes	FACU
2. *Helianthus grosseserratus*	15	Yes	FACW
3. *Bromus inermis*	15	Yes	FACU
4. *Panicum virgatum*	10	No	FAC
5. *Setaria viridis*	10	No	UPL
6. *Verbena stricta*	5	No	UPL
7. *Oenothera biennis*	5	No	FACU
8. *Spartina pectinata*	5	No	FACW
9.			
10.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	10	x 3 =	30
FACU species	70	x 4 =	280
UPL species	15	x 5 =	75
Column Totals:	115 (A)		425 (B)
Prevalence Index = B/A =			3.7

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: BCS-W01-1u

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

No soil pit taken due to old railroad tracks. Soils assumed non-hydric based on the absence of hydrophytic vegetation, lack of wetland hydrology, and soil disturbance from tracks.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: CMC Beatrice Compressor Station City/County: Gage County Sampling Date: 11/12/2025

Applicant/Owner: Northern Natural Gas State: NE Sampling Point: BCS-W01-1w

Investigator(s): JL CP Section, Township, Range: S15, T003N, R006E

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 40.221028 Long: -96.740889 Datum: WGS84

Soil Map Unit Name: Morrill loam, 11 to 17 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Point taken in a wet meadow.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: ft)			
1. *Phalaris arundinacea*	85	Yes	FACW
2. *Apocynum cannabinum*	10	No	FAC
3. *Asclepias syriaca*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	85	x 2 =	170
FAC species	10	x 3 =	30
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)

Prevalence Index = B/A = 2.2

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤3.0[1]
____ 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.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: BCS-W01-1w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/1	98	7.5YR 4/6	2	C	M	Silty Clay Loam	
12-20	10YR 4/2	95	7.5YR 4/6	5	C	M	Silty Clay Loam	
20-24	10YR 2/1	98	7.5YR 4/6	2	C	M	Silty Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: CMC Palmyra Compressor Station | City/County: Otoe County | Sampling Date: 11/10/2025
Applicant/Owner: Northern Natural Gas | State: NE | Sampling Point: PAL-SP01
Investigator(s): JL CP | Section, Township, Range: S14, T009N, R009E
Landform (hillside, terrace, etc.): Talf | Local relief (concave, convex, none): Linear
Slope (%): 0 | Lat: 40.747503 | Long: -96.368777 | Datum: WGS84
Soil Map Unit Name: Nodaway-Colo complex, occasionally flooded | NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in mowed area. Appears to be a wetland located outside the ESB to the north beyond the compressor station fence.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Setaria viridis*	40	Yes	UPL
2. *Poa pratensis*	25	Yes	FAC
3. *Elymus repens*	20	Yes	FACU
4. *Festuca subverticillata*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	30	x 4 =	120
UPL species	40	x 5 =	200
Column Totals:	95 (A)		395 (B)
Prevalence Index = B/A =			4.16

Hydrophytic Vegetation Indicators:
- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: PAL-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/1	100					Clay Loam	
6-24	10YR 3/1	95	7.5YR 5/8	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

Appendix D – Site Photographs

Photo 1. View from wetland point BCS-W01-1w at Beatrice compressor station, photo taken facing south.

Photo 2. View from upland point BCS-W01-1u at Beatrice compressor station, photo taken facing south.

Photo 3. View of waterway BCS-S01 at Beatrice compressor station, photo taken facing southwest.

Photo 4. General view of maintained lawn and Northern facilities at Beatrice compressor station, photo taken facing south.

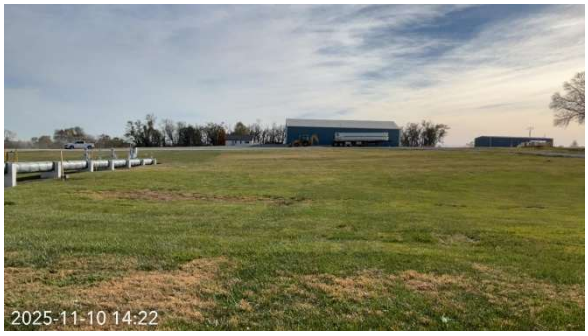


Photo 5. View from sample point PAL-SP01 at Palmyra compressor station, photo taken facing south.

Photo 6. View from sample point PAL-SP01 at Palmyra compressor station, photo taken facing west.

Photo 7. Geneal view of open land at Palmyra compressor station, photo taken facing north.

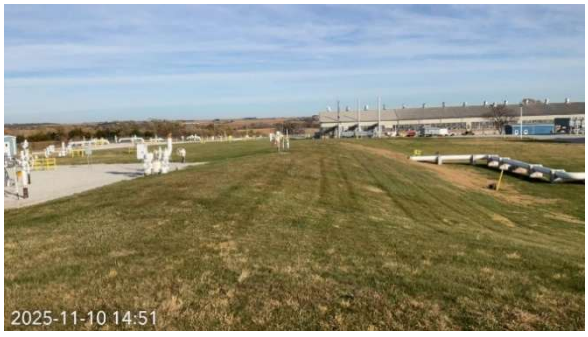


Photo 8. General view of maintained lawn and Northern facilities at Palmyra compressor station, photo taken facing east.

Guthrie Center Compressor Station

Oakland Compressor Station

Wetland Delineation Report

Central Mainline Corridor Expansion
Project – Guthrie Center
Compressor Station and Oakland
Compressor Station
Guthrie and
Pottawattamie Counties, Iowa
Stantec Project #: 172609221

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Sign-off Sheet

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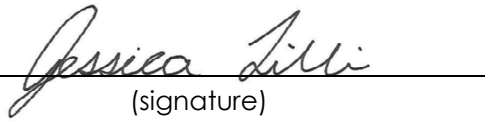
Prepared by  (signature)

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1.0 INTRODUCTION

Stantec understands that Northern Natural Gas (Northern) is regulated by the Federal Energy Regulatory Commission (FERC) and is responsible to comply with the Clean Water Act and with applicable state and local wetland regulations. Both the United States (U.S.) Army Corps of Engineers (USACE) and Iowa Department of Natural Resources (IDNR) have regulatory authority over wetlands, navigable waters, and adjacent lands. Northern is required to review proposed actions and determine whether such actions may affect a waterbody or wetland under the jurisdiction of the IDNR or the USACE. Northern secured the services of Stantec Consulting Services Inc. (Stantec) to conduct an evaluation for the proposed Central Mainline Corridor Expansion Project – Guthrie Center compressor station and Oakland compressor station (Project).

The Environmental Survey Boundary (ESB) for the Guthrie Center compressor station is approximately 15.48 acres in size and is located in Guthrie County, Iowa (Appendix A, Figure 1). The ESB for the Oakland compressor station is approximately 44.35 acres in size and is located in Pottawattamie County, Iowa (Appendix A, Figure 1). The purpose and objective of the wetland determination and delineation were to identify the extent and spatial arrangement of wetlands and waterways within the ESB. The wetland delineations for the Project were completed by Stantec on November 04, 2025.

Wetland and waterways may be subject to federal regulation under the jurisdiction of the USACE, state regulation under the jurisdiction of the IDNR and local regulation under jurisdiction of local county, town, city, or village. Stantec recommends this report be submitted to local authorities, the IDNR and USACE for final jurisdictional review and concurrence, as necessary.

2.0 METHODS

2.1 WETLANDS

Wetland determinations were based on the criteria and methods outlined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual,* Technical Report Y-87-1 (1987) and subsequent guidance documents (USACE 1991, 1992), and applicable Regional Supplements to the *Corps of Engineers Wetland Delineation Manual*.

The wetland determination involved the use of available resources to assist in the assessment such as U.S. Geological Survey (USGS) topographic maps, U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) soil survey, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapping, National Hydrography Dataset (NHD) mapping, and aerial photography.

On-site wetland determinations were made using the three criteria (vegetation, soil, and hydrology) and technical approach defined in the USACE 1987 Manual and applicable Regional Supplement. According to procedures described in the 1987 Manual and applicable Regional Supplement, areas that under normal circumstances reflect a predominance of hydrophytic vegetation, hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

Additionally, as climate plays an important role in the formation and identification of wetlands, the antecedent precipitation in the months leading up to the field investigations was reviewed. Antecedent precipitation was determined prior to the field investigation utilizing the USACE Antecedent Precipitation Tool (APT) (USACE 2025a). The tool compares precipitation totals from the three months prior to the date of the field efforts with 30-year normal amounts, calculating a weighted multi-month score and determining the climate conditions (dry, normal, wet).

A review of USDA Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP) aerial imagery and other available aerial imagery was conducted for the ESB to assist in the wetland delineation because farmed areas are present within the ESB with mapped poorly drained or somewhat poorly drained soils. The aerial imagery was reviewed for the appearance of wetland signatures within the farmed areas. A wetland signature is field evidence, recorded by aerial imagery, of ponding, flooding, or impacts of saturation for sufficient duration, which meets wetland hydrology and possibly wetland vegetation criteria.

The presence of mapped poorly and somewhat poorly drained soils, NWI mapping, and topography within the ESB was reviewed in conjunction with an analysis of available aerial imagery for wetland signatures in these areas. For each potential wetland area identified in the aerial imagery review, a sample point was collected during the field investigation. If the sample point met the wetland criteria, then the wetland area was mapped in the field.

The wetland boundary and sampling points were identified and surveyed with an iPad equipped with a Global Navigational Satellite System (GNSS) capable of sub-meter accuracy and mapped using Geographical Information System (GIS) software.

2.2 WATERWAYS

Observed waterways, waterbodies, culverts, and/or other connections to off-site wetland or aquatic features were mapped and described. Geomorphological characteristics of each waterway were collected at a waterway sample point, including the width and height of top of bank, the width and height of the ordinary high-water mark (OHWM), and channel substrate. The waterway lines, polygons, and sample point locations were surveyed with an iPad equipped with ESRI Field Maps and a GNSS capable of sub-meter accuracy and mapped using GIS software. However, the review of waterway potential for federal jurisdiction was beyond the scope of the investigation.

3.0 RESULTS

3.1 SITE DESCRIPTION

Both ESBs are primarily comprised of a mixture of maintained lawn/open land, roadside rights-of-way (ROW), and existing Northern facilities. Overall, the ESBs are relatively level with shallow slopes and gently rolling hills. Soils present within each ESB, and their hydric status are summarized in Tables 1 and 2 (Appendix A, Figure 2).

Table 1. Summary of Soils Identified within the Guthrie Center Compressor Station ESB

Soil Survey of Guthrie County, IA	Map Unit	Hydric Rating
Colo-Judson silty clay loams, 0 to 5 percent slopes, occasionally flooded	11B	Predominantly Hydric
Sharpsburg silty clay loam, 5 to 9 percent slopes	370C	Predominantly Non-Hydric
Sharpsburg silty clay loam, 5 to 9 percent slopes, eroded	370C2	Non-Hydric
Sharpsburg silty clay loam, 9 to 14 percent slopes, eroded	370D2	Non-Hydric
Shelby clay loam, dissected till plain, 9 to 14 percent slopes, eroded	Y24D2	Non-Hydric

Table 2. Summary of Soils Identified within the Oakland Compressor Station ESB

Soil Survey of Pottawattamie County, IA	Map Unit	Hydric Rating
Exira silty clay loam, 9 to 14 percent slopes, eroded	99D2	Non-Hydric
Judson silty clay loam, deep loess, 2 to 5 percent slopes	8B	Predominantly Non-Hydric
Marshall silty clay loam, 2 to 5 percent slopes	9B	Non-Hydric
Colo silt loam, deep loess, 0 to 2 percent slopes, overwash, occasionally flooded	133+	Predominantly Hydric
Marshall silty clay loam, 5 to 9 percent slopes, eroded	9C2	Non-Hydric

Soil Survey of Pottawattamie County, IA	Map Unit	Hydric Rating
Shelby-Adair clay loams, deep loess, 9 to 14 percent slopes, eroded	Z93D2	Non-Hydric

The NWI map identified one freshwater pond wetland community (PUBGx) in the Oakland compressor station ESB. No NWI features were identified within the Gutherie Center compressor station ESB (Appendix A, Figure 3).

Precipitation was analyzed using the USACE APT which calculates a three-month rolling precipitation total. Precipitation was considered *normal* prior to the field investigations on November 04, 2025, for the Guthrie Center compressor station ESB and Oakland compressor station ESB. APT results are shown in the precipitation figures in Appendix B.

3.2 WETLANDS

During the November 2025 field investigations, no wetlands were identified within the Guthrie Center compressor station ESB or the Oakland compressor station ESB.

3.3 UPLAND

Uplands consisted of maintained open land/lawn, roadside ROW, and existing Northern facilities. Dominant plant species identified in the upland herbaceous layer included smooth brome (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*), Indian grass (*Sorghastrum nutans*), Canada thistle (*Cirsium arvense*), wild carrot (*Daucus carota*), and reed canary grass (*Phalaris arundinacea*). Little to no tree and shrub species were present at time of the investigations.

An investigation sample point was taken within each of the ESBs. Investigation sample points were taken in areas of the ESB with either an aerial wetland signature or low landscape position with an overall representation of the ESB. A soil test pit was not taken within the Oakland compressor station due to the presence of utilities. Soils were instead assumed non-hydric based on the NRCS soils mapped rating of non-hydric and a lack of hydrophytic vegetation and wetland hydrology indicators. The soil sample point location at the Guthrie Center compressor station met hydric soil indicator Redox Dark Surface (F6); however, wetland hydrology and hydrophytic vegetation criteria were not met.

Sample point locations are shown in Appendix A, Figure 4 and associated wetland determination forms are contained in Appendix C.

3.4 WATERWAYS

The 2025 field investigations identified one waterway within the Guthrie Center compressor station ESB and two waterways within the Oakland compressor station ESB. Characteristics of these waterways are summarized in Table 3 and are depicted on Appendix A, Figure 4.

Table 3. Summary of Waterways Identified within the Project ESBs

Waterway ID	Flow Class	Height of Bank (feet)[1]	Top of Bank Width of Stream (feet)[1]	Water Depth (feet)[1]	Associated Surface Waters	Acreage within ESB
Guthrie compressor station						
GCS-S01	Intermittent/ Modified Ditch	4	9	0	No	0.10
Oakland compressor station						
OCS-S01	Intermittent/ Modified Ditch	2	10	0.5	No	0.10
OCS-S02	Intermittent/ Modified Ditch	4	8	0	No	0.04

[1]Waterway bank and depth measurements are approximate

3.5 WATERBODIES

The 2025 field investigations identified one waterbody within the Oakland compressor station ESB. Characteristics of the waterbody are summarized in Table 4 and are depicted on Appendix A, Figure 4.

Table 4. Summary of Waterbodies Identified within the Oakland Compressor Station ESB

Waterbody ID	Waterbody Type	Adjacent Surface Waters	Acreage within the ESB
OCS-OW01	Stormwater Pond	No	0.26

No waterbodies were identified in the Guthrie Center compressor station ESB during the November 2025 field investigations.

3.6 OTHER ENVIRONMENTAL CONSIDERATIONS

This report is limited to the identification of state and/or federally regulated wetlands and waterways within the ESB. However, there may be other regulated environmental features within the ESB, including, but not limited to, historical or archeological features, endangered or threatened species, navigable waters and/or floodplains, etc. Federal, state, and local units of government and regional planning organizations may have regulatory authority to control or restrict land uses within or in close proximity to these features. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

4.0 CONCLUSION

Stantec performed a wetland delineation on behalf of Northern for the Central Mainline Corridor Expansion Project – Guthrie Center compressor station and Oakland compressor station. The purpose and objective were to identify the extent and spatial arrangement of wetlands and waterways within the ESBs.

During the 2025 field investigations, three waterways and one waterbody were identified and delineated across the Project ESBs in accordance with state and federal guidelines and were subsequently surveyed with GNSS and mapped using GIS software. No wetlands were identified within the Project ESBs. There was a combined total of 0.24 acre of waterways, 0.26 acre of waterbodies delineated across the two compressor station ESBs. Identified waterways were classified as intermittent streams/modified ditches, and the waterbody was classified as a stormwater pond. Adjacent uplands were primarily composed of maintained lawn/open land, roadside ROW, and existing Northern facilities.

Wetlands and waterways that are considered waters of the U.S. are subject to regulation under Section 404 of the Clean Water Act and the jurisdictional regulatory authority lies with the USACE as well as the IDNR.

Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that Northern obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed work to comply with applicable regulations. Stantec can assist with identification and/or assessment of additional regulated resources at your request, to the extent that the work is within our range of expertise.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present in the ESB at the time of the fieldwork. The delineation was performed by experienced and qualified professionals using standard practices and sound professional judgment. The ultimate decision on wetland boundaries rests with the USACE, and in some cases, the IDNR or a local unit of government. As a result, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary from time to time depending on various factors including, but not limited to recent precipitation patterns and the season of the year. In addition, the physical characteristics of the ESB can change over time, depending on the weather, vegetation patterns, drainage activities on adjacent parcels, or other events. Any of these factors can change the nature and extent of wetlands within the ESB.

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Appendix A – Figures

Figure 1. Project Location

Figure 2. NRCS Soil Survey Data w/Hydric Rating

Figure 3. National Wetlands Inventory and National Hydrography Dataset

Figure 4. Field Collected Data

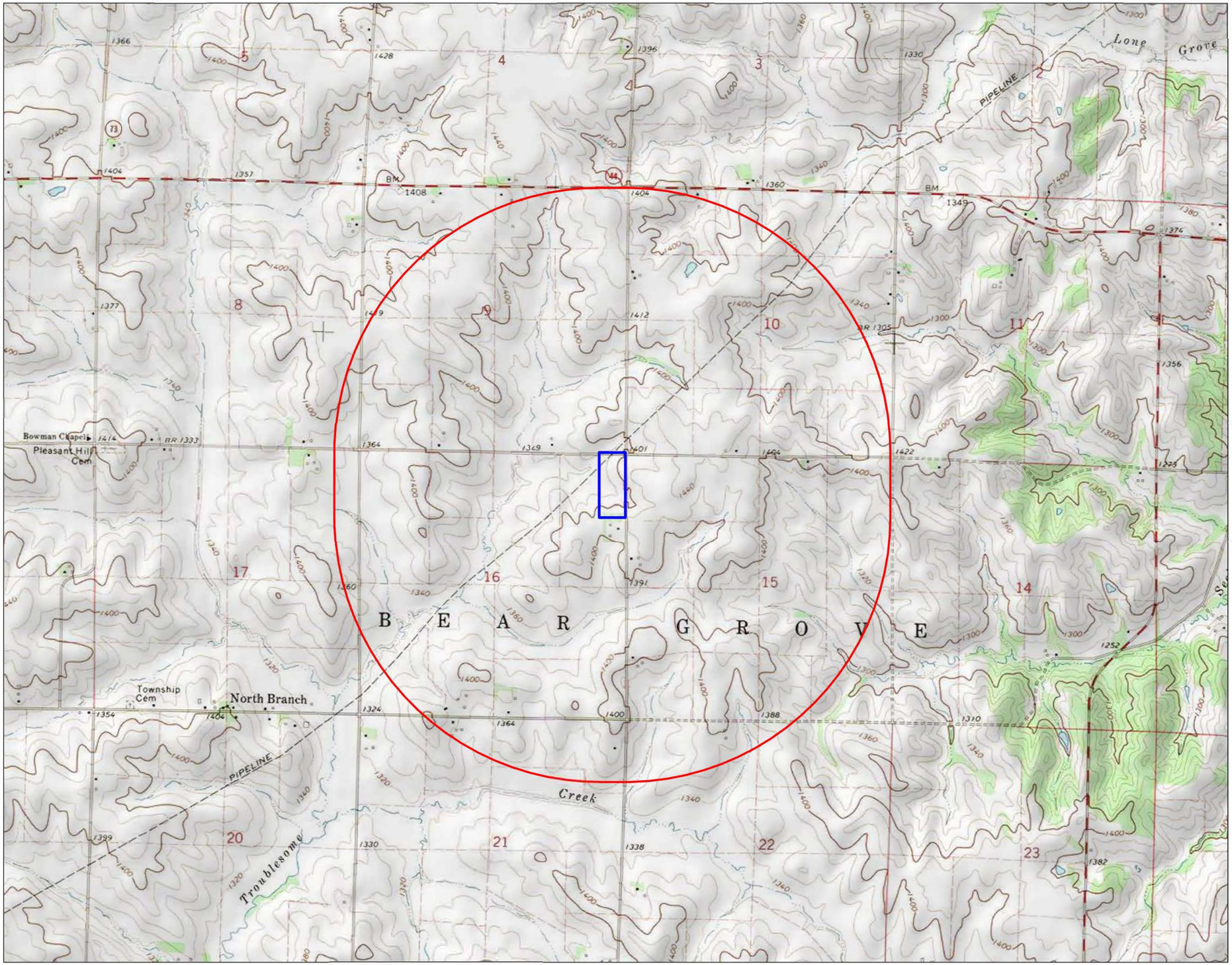


Figure No.

1

Title

Project Location & 1-Mile Buffer
Guthrie Center Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

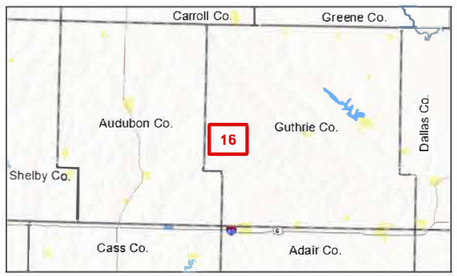
Project Location
Township of Bear Grove
Guthrie County, Iowa

Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 1,000 2,000 Feet
(At original document size of 11x17)
1:24,000

Legend
- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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U:\172\172609221\03_data\gis_cad\gis\MxdPro\172609221_Central_Mainline_Delineation\172609221_Central_Mainline_Delineation.aprx Revised: 2026-03-20 By: safoster

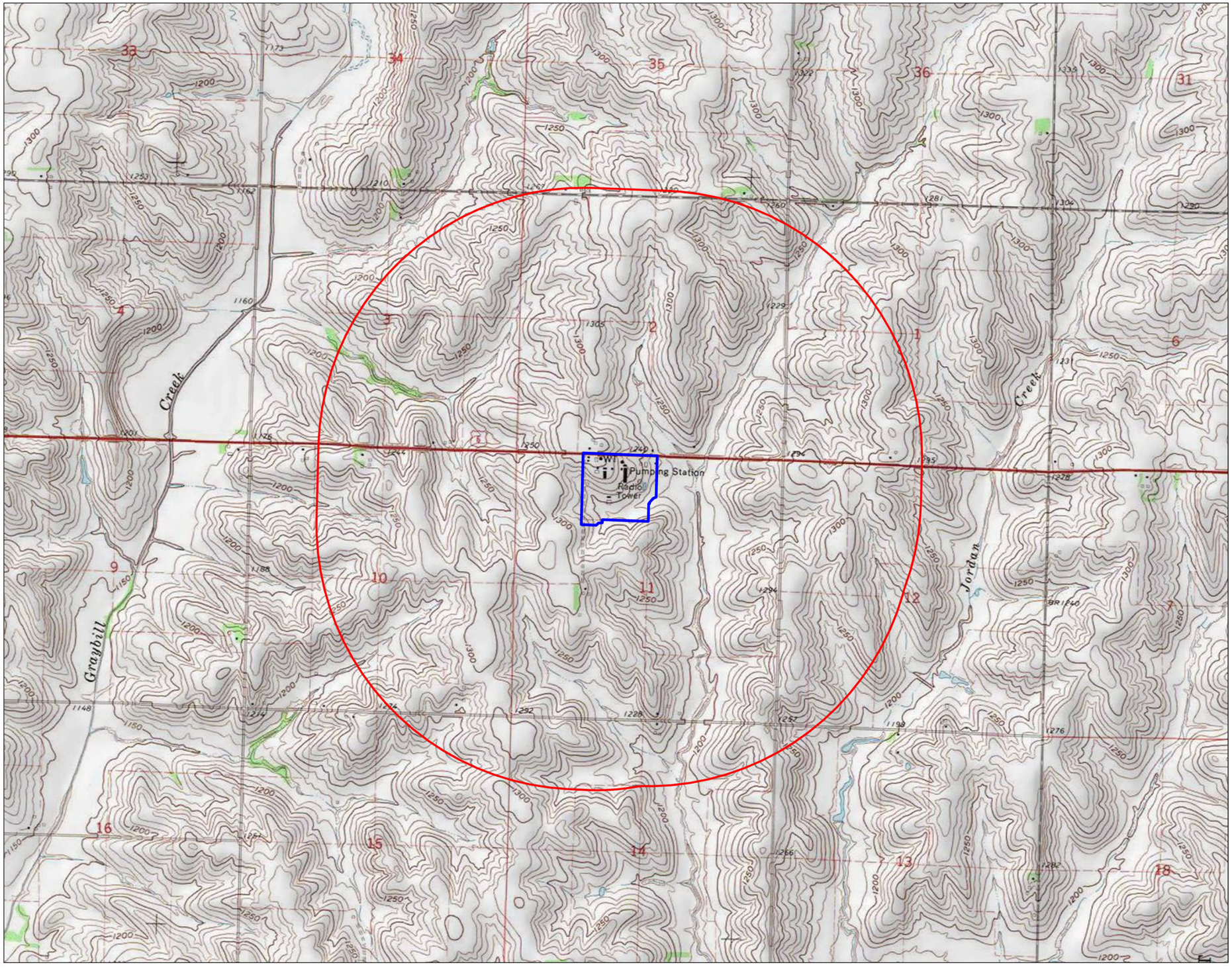


Figure No.

1

Title

Project Location & 1-Mile Buffer
Oakland Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Center
Pottawattamie County, Iowa

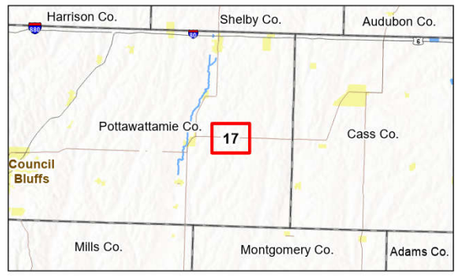
Prepared by JM on 2026-02-10
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 1,000 2,000 Feet
(At original document size of 11x17)
1:24,000

Legend

- Environmental Survey Boundary
- 1-Mile Buffer



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: USGS 7.5' Topographic Quadrangles

Stantec

Northern Natural Gas

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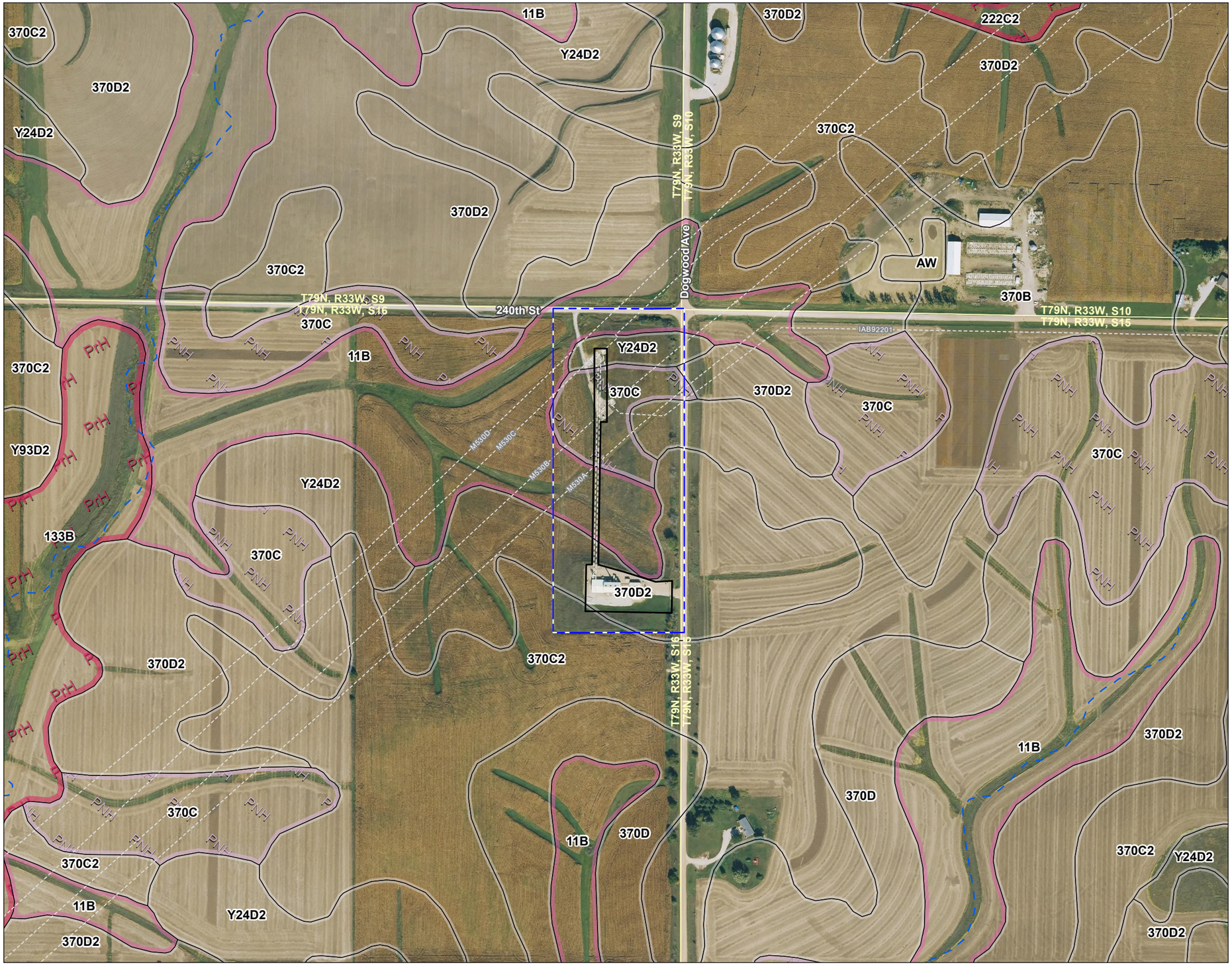


Figure No.

2

Title

NRCS Soil Survey Data
Guthrie Center Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Bear Grove
Gutherie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace

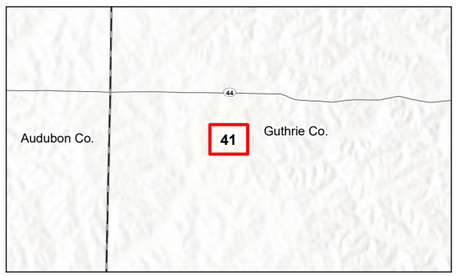
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

2

Title

NRCS Soil Survey Data
Oakland Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Center
Pottawattamie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace

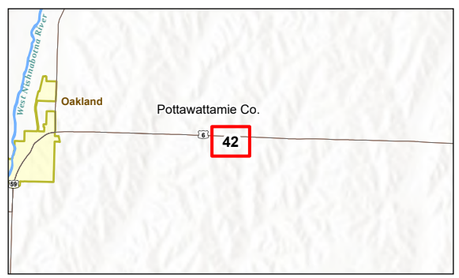
NRCS Soil Survey Data

Hydric Soil Rating

- Hydric (H)
- Predominantly Hydric (PrH)
- Partially Hydric (PaH)
- Predominantly Non-Hydric (PNH)
- Non-Hydric

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, NRCS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Guthrie Center Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Bear Grove
Guthrie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

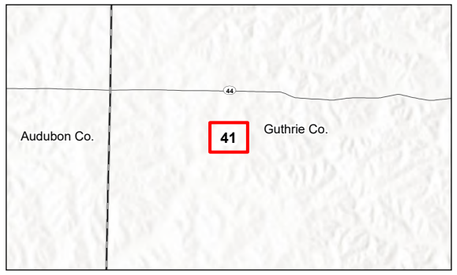
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS, USFWS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

3

Title

National Wetlands Inventory
Oakland Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Center
Pottawattamie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

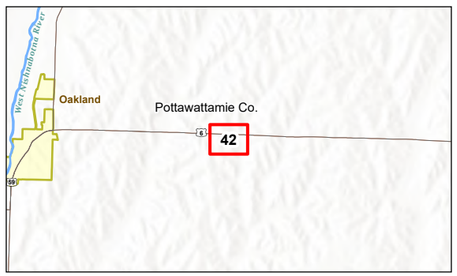
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- National Wetlands Inventory Feature

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
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3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Guthrie Center Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Bear Grove
Guthrie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

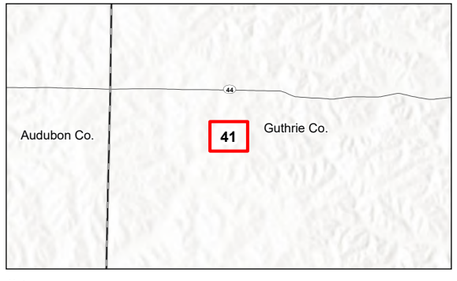
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Sample Point
- Upland Drainage Feature
- Field Delineated Waterway Area

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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Figure No.

4

Title

Field Collected Data
Oakland Compressor Station

Client/Project 172609221

Northern Natural Gas
Central Mainline Corridor Expansion Project

Project Location
Township of Center
Pottawattamie County, Iowa

Prepared by JM on 2026-02-09
TR by SF on 2026-02-12
IR by SK on 2026-03-20

N

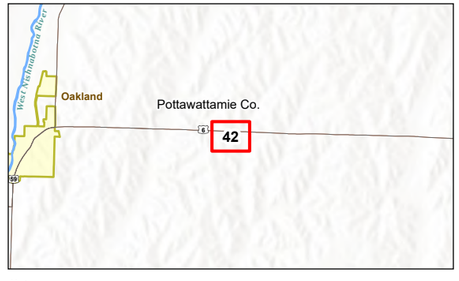
0 200 400 Feet
(At original document size of 11x17)
1:4,800

Legend

- Existing Pipeline
- Environmental Survey Boundary
- Temporary Workspace
- Culvert
- Upland Drainage Feature
- Field Delineated Waterway Line
- Field Delineated Waterway Area
- Field Delineated Open Water

National Hydrography Dataset

- Perennial Stream
- Intermittent Stream
- Canal/Ditch
- Waterbody



Notes
1. Coordinate System: NAD 1983 UTM Zone 15N
2. Data Sources: Stantec, NNG, Esri, USCB, USGS
3. Background: NAIP 2023

Stantec

Northern Natural Gas

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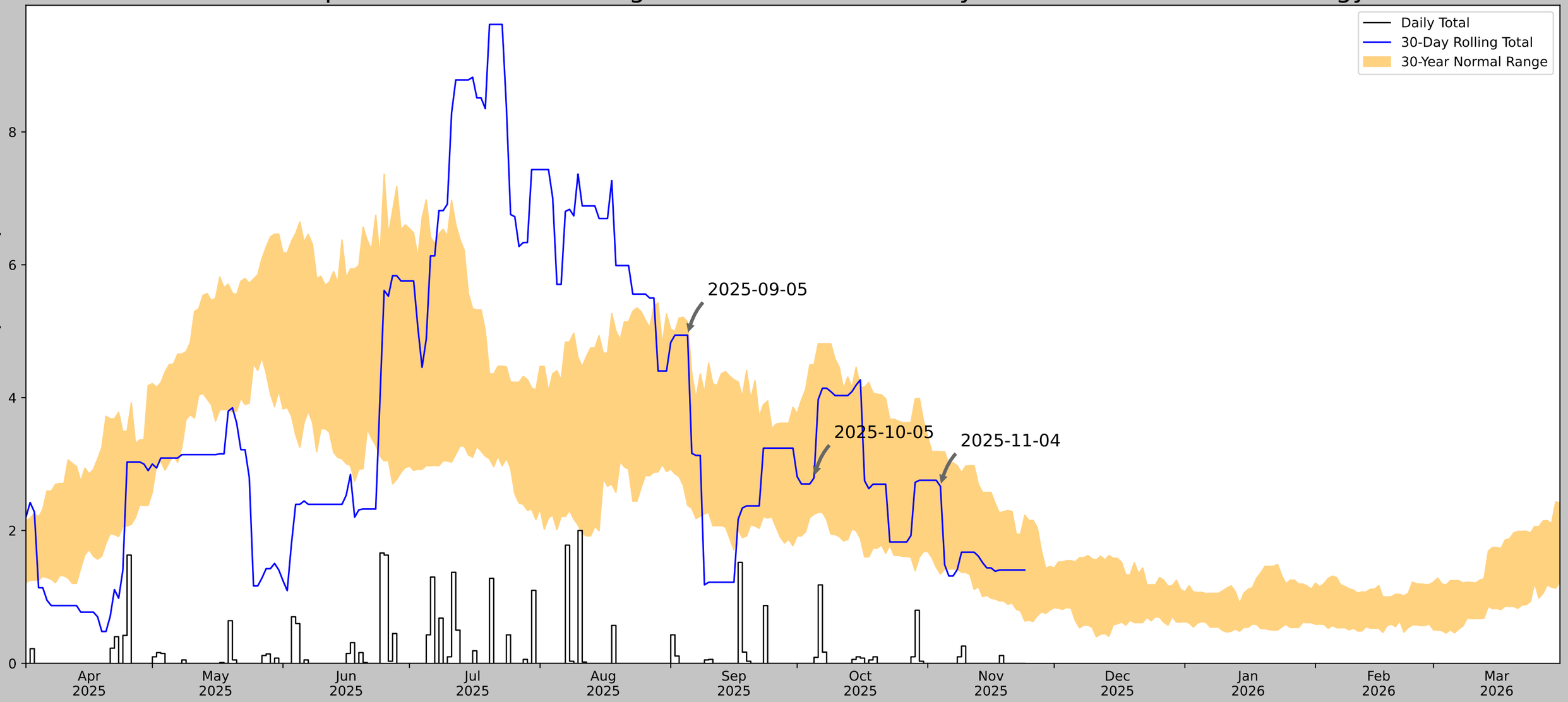
Appendix B – Precipitation Analysis

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.65785, -94.68702
Observation Date	2025-11-04
Elevation (ft)	1381.469
Drought Index (PDSI)	Moderate wetness (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-04	1.344488	3.186221	2.665354	Normal	2	3	6
2025-10-05	2.243701	4.494095	2.791339	Normal	2	2	4
2025-09-05	2.379921	5.140158	4.940945	Normal	2	1	2
Result							Normal Conditions - 12

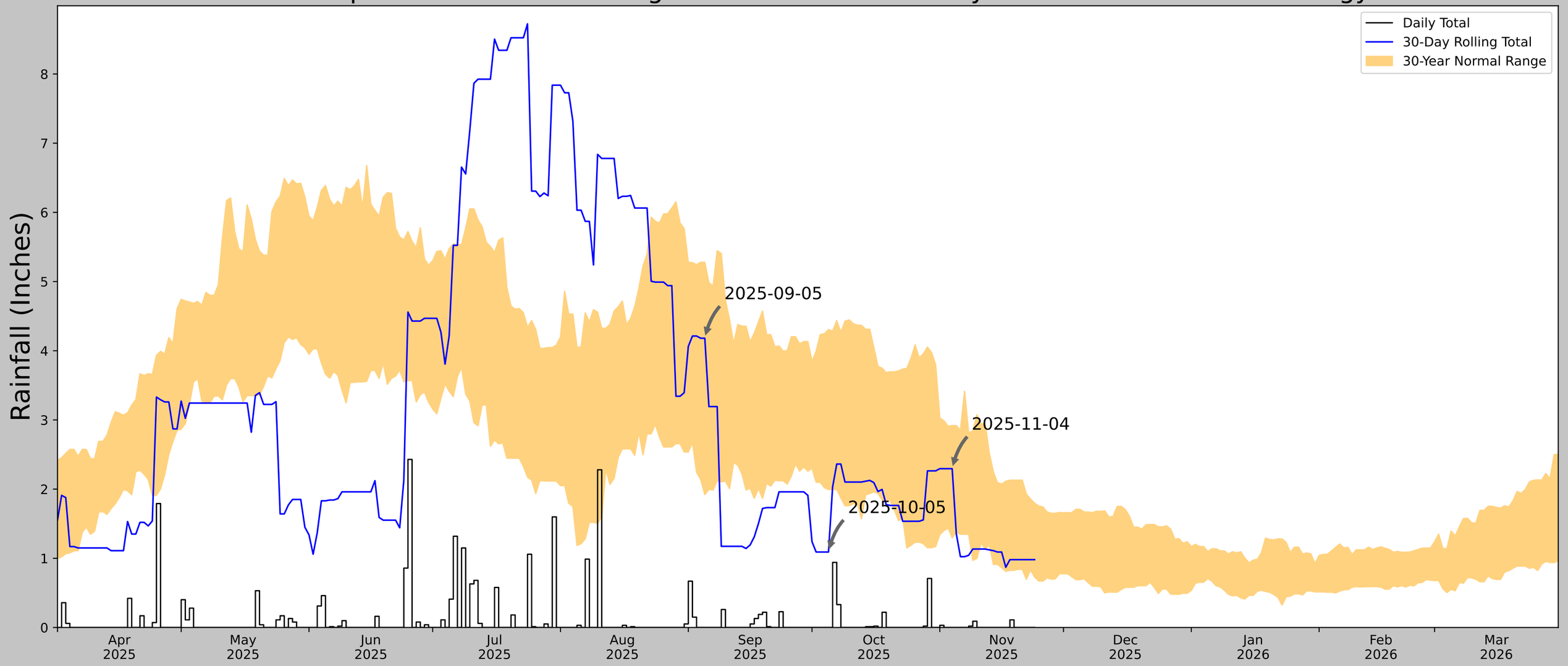
Figures and tables made by the Antecedent Precipitation Tool Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
AUDUBON	41.7069, -94.9222	1279.856	12.6	101.613	6.95	11128	88
ELK HORN 0.2 SSE	41.5905, -95.0592	1348.097	10.71	68.241	5.55	7	1
ATLANTIC 7.1 NNE	41.4943, -94.965	1345.144	14.855	65.288	7.655	62	1
ATLANTIC 1 NE	41.4175, -95.0042	1151.903	20.44	127.953	11.813	153	0
CARROLL	42.065, -94.85	1240.158	25.02	39.698	12.252	3	0

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	41.31614, -95.30181
Observation Date	2025-11-04
Elevation (ft)	1276.94
Drought Index (PDSI)	Mild drought (2025-10)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2025-11-04	1.297244	2.918504	2.295276	Normal	2	3	6
2025-10-05	1.993307	4.305906	1.090551	Dry	1	2	2
2025-09-05	1.920866	5.277953	4.181102	Normal	2	1	2
Result							Normal Conditions - 10

Figures and tables made by the
Antecedent Precipitation Tool
Version 3.0

US Army Corps of Engineers.
ERDC

Developed by:
U.S. Army Corps of Engineers and
U.S. Army Engineer Research and
Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
OAKLAND	41.3044, -95.3844	1259.843	4.362	17.097	2.038	10616	89
HANCOCK 7SE	41.3278, -95.2522	1310.039	7.048	50.196	3.525	315	0
HANCOCK	41.39, -95.3714	1115.158	5.953	144.685	3.54	51	0
ATLANTIC 5 SW	41.3061, -95.0847	1160.105	15.556	99.738	8.552	4	1
ATLANTIC 0.7 SE	41.39, -95.0061	1301.837	20.494	41.994	10.083	8	0
PERSIA 2.0 S	41.5495, -95.5722	1191.929	19.531	67.914	10.115	29	0
UNDERWOOD	41.3897, -95.6814	1087.927	16.494	171.916	10.258	153	0
HASTINGS 4NE	41.0772, -95.48	1064.961	16.466	194.882	10.619	3	0
HARLAN	41.6453, -95.3339	1270.013	23.699	10.17	10.906	174	0

Appendix C – Wetland Determination Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: CMC Guthrie Center Compressor Station City/County: Guthrie County Sampling Date: 11/04/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: GCS-SP01

Investigator(s): JL CP Section, Township, Range: S16, T079N, R033W

Landform (hillside, terrace, etc.): Toeslope Local relief (concave, convex, none): Concave

Slope (%): 1-2 Lat: 41.657855 Long: -94.687015 Datum: WGS84

Soil Map Unit Name: Colo-Judson silty clay loams, 0 to 5 percent slopes, occasionally flooded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Point taken in a swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	60	Yes	FACU
2. *Bromus inermis*	20	Yes	FACU
3. *Phalaris arundinacea*	10	No	FACW
4. *Cirsium arvense*	5	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	95	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	95 (A)		360 (B)

Prevalence Index = B/A = 3.79

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: GCS-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/1	100					Clay Loam	
8-12	10YR 3/1	98	7.5YR 4/6	2	C	M	Clay Loam	
12-24	10YR 2/1	95	7.5YR 4/6	5	C	M	Clay Loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Iron Monosulfide (A18)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

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

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Midwest Region
See ERDC/EL TR-10-16; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: CMC Oakland Compressor Station City/County: Pottawattamie County Sampling Date: 11/04/2025

Applicant/Owner: Northern Natural Gas State: IA Sampling Point: OCS-SP01

Investigator(s): CP, JL Section, Township, Range: S11, T075N, R039W

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave

Slope (%): 2-5 Lat: 41.314876 Long: -95.302629 Datum: WGS84

Soil Map Unit Name: Judson silty clay loam, deep loess, 2 to 5 percent slopes NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Point taken in a mowed area.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft)			
1.			
2.			
3.			
4.			
5.			
	0	=Total Cover	
Herb Stratum (Plot size: 5 ft)			
1. *Sorghastrum nutans*	75	Yes	FACU
2. *Elymus repens*	10	No	FACU
3. *Panicum virgatum*	10	No	FAC
4. *Setaria glauca*	5	No	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 30 ft)			
1.			
2.			
	0	=Total Cover	

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 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	15	x 3 =	45
FACU species	85	x 4 =	340
UPL species	0	x 5 =	0
Column Totals:	100 (A)		385 (B)

Prevalence Index = B/A = 3.85

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is ≤3.0[1]
- 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.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: OCS-SP01

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___Histosol (A1)
- ___Histic Epipedon (A2)
- ___Black Histic (A3)
- ___Hydrogen Sulfide (A4)
- ___Stratified Layers (A5)
- ___2 cm Muck (A10)
- ___Depleted Below Dark Surface (A11)
- ___Thick Dark Surface (A12)
- ___Iron Monosulfide (A18)
- ___Sandy Mucky Mineral (S1)
- ___5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ____ Iron-Manganese Masses (F12)
- ___Red Parent Material (F21)
- ___Very Shallow Dark Surface (F22)
- ___Other (Explain in Remarks)

[3]Indicators 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** X

Remarks:

Soils assumed hydric based on non-hydric rating by the NRCS. No soil pit taken within the compressor station.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

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

Wetland Hydrology Present? **Yes** ____ **No** X

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

Remarks:

Appendix D – Site Photographs

Photo 1. View from sample point GCS-SP01 at Guthrie Center compressor station, photo taken facing west.

Photo 2. View from sample point GCS-SP01 at Guthrie Center compressor station, photo taken facing north.

Photo 3. View of waterway GCS-S01 at Guthrie Center compressor station, photo taken facing west.

Photo 4. General view of open land at Guthrie Center compressor station, photo taken facing south.

Photo 5. View of from sample point OCS-SP01 at Oakland compressor station, photo taken facing east.

Photo 6. View of from sample point OCS-SP01 at Oakland compressor station, photo taken facing north.

Photo 7. View of waterway OCS-S01 at Oakland compressor station, photo taken facing west.

Photo 8. View of waterway OCS-S02 at Oakland compressor station, photo taken facing southwest.

Photo 9. View of open water OCS-OW01 at Oakland compressor station, photo taken facing north.

Photo 10. General view of grassland and Northern facilities at Oakland compressor station, photo taken facing west.

Appendix 2C
Wetland Restoration Plan

Wetland Restoration Plan

Central Mainline Corridor Expansion Project

April 2026

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1.0 GENERAL PROJECT DESCRIPTION

Northern Natural Gas (Northern) is planning construction of the Central Mainline Corridor Expansion Project (Project) between 2027 and 2029 in Nebraska and Iowa. The proposed facilities include:

- Approximately 26.15 miles of pipeline
- Uprate at the 20-inch-diameter Des Moines C-line south loop
- Modifications to five compressor stations to allow for bidirectional flow

Installation and removal of appurtenant facilities include:

- New compressor station
- New launchers, receivers, new valves and piping inside existing facility
- New unregulated meter station
- Removal of short sections of pipe to accommodate installation activities
- Removal of an odorizer tank and install a larger odorizer tank
- Relocation of one receiver facility
- Removal of check valve, control valves and associated pipe at five compressor stations to accommodate bid-directional flow

2.0 PURPOSE

The primary purpose of this Wetland Restoration Plan (Plan) is to implement FERC's Wetland and Waterbody Construction and Mitigation Procedures by restoring hydrology, vegetation, and ecological functions to the affected wetland areas disturbed during the Project construction. This Plan aligns with FERC's Upland Erosion Control, Revegetation, and Maintenance Plan, ensuring compliance with CFR 18 §380.12 and permit conditions, and establishing performance-based measures to avoid, minimize, and mitigate impacts. Northern has adopted FERC's Procedures as its own with the exception of select workspace incursions detailed in Resource Report 1, Table 1.3-4.

3.0 METHODS AND FINDINGS

Field surveys were completed in 2025 to locate and verify the presence of wetlands within the Project Environmental Survey Boundary (ESB) using the Routine On-Site Determination Method defined in the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (USACE 1987), subsequent guidance documents (USACE 1991 and 1992), the Midwest Regional Supplement (USACE 2010). Northern completed wetland and waterbody field surveys of 98 percent of the parcels within the Project ESB.

3.1 Delineated Features

Forty-four palustrine emergent wetlands were identified within the ESB surveyed for the Project; however, only 14 wetlands will be crossed by the Project. Wetland classifications, including vegetation community profiles and qualitative assessments. are discussed in greater detail within the wetland delineation reports with Appendix 2B, Resource Report 2.

4.0 PROPOSED IMPACTS

Northern will avoid impacts to 30 wetlands and minimize wetland impacts on the remaining 14 wetlands inside the Project ESB. Northern will cross one wetland via HDD. Additionally, a portion of wetland PRB-W10 will be crossed by HDD to minimize impacts to the wetland. The remaining 13 wetlands will be crossed using open-cut or will be temporarily impacted by TWS, ETWS or TAR associated with the installation of the pipelines. Northern will implement the Project Stormwater Pollution Prevention Plans to reduce ground disturbance, minimize erosion and sediment run off and promote revegetation within the construction areas. All but two wetlands will be crossed using a 75-foot-wide temporary workspace to minimize impacts. No forested or scrub-shrub wetlands will be crossed by the Project.

In wetlands, a ten-foot-wide operational corridor centered on the pipeline will be cleared at a frequency necessary to maintain an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that will compromise the integrity of the pipeline coating will be selectively removed from the ROW. Northern will not conduct any routine vegetation mowing or clearing in wetlands or riparian environments that are between HDD entry and exit points.

Proposed wetland locations and impacts for the Project are located in Table 1 below.

Table 1. Wetlands Crossed by the Project

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Primary Wetland Crossing Method	Area Affected by Construction (acres)	Area Affected by Operation (acres)	
	From	To					Operational Fill	Operational Maintenance[3,5]
OMA-W08	0.11	0.12	Degraded wet meadow / PEM1B	44	TWS/Open-Cut	0.07[6]	0.00	0.05
OMA-W09	1.15	1.15	Degraded wet meadow / PEM1B	13	TWS/Open-Cut	0.02[6]	0.00	0.02
OMA-W01	8.57	8.61	Degraded wet meadow / PEM1B	176	TWS/Open-Cut	0.29[6]	0.00	0.20
Subtotal				**233**		**0.38**	**0.00**	**0.27**
PRB-W12	3.28	3.29	Degraded wet meadow / PEM1B	29	TWS/Open-Cut	0.05[6]	0.00	0.04
PRB-W15	4.94	4.95	Degraded wet meadow / PEM1B	41	TWS/Open-Cut	0.08[6]	0.00	0.00
PRB-W13	5.43	5.43	Degraded wet meadow / PEM1B	12	TWS/Open-Cut	0.01[6]	0.00	0.00
	5.44	5.44		22	TWS/Open-Cut	0.03[6]	0.00	0.00
PRB-W29	7.24	7.24	Shallow Marsh / PEM1C	30	TWS/Open-Cut	0.06[6]	0.00	0.04
PRB-W10	7.46	7.47	Shallow Marsh / PEM1C	36	HDD	0.01[9]	0.00	0.00[4]
	N/A			N/A	TAR	0.01[6]	0.00	0.00
PRB-W11	7.58	7.58	Degraded wet meadow / PEM1B	0	HDD	<0.01[8,9]	0.00	0.00[4]
PRB-W34	13.24	13.25	Degraded wet meadow / PEM1B	31	TWS/Open-Cut	0.04[6]	0.00	0.03
Subtotal				**201**		**0.29**	**0.00**	**0.11**
DMS-W03	16.28	16.28	Seasonally flooded basin/farmed wetland / PEM1Af	16	TWS/Open-Cut	0.02	0.00	0.02
Subtotal				**16**		**0.02**	**0.00**	**0.02**

Unique Wetland Identifier	MP		Field Determined Wetland Classification[1]	Length of Crossing (feet)[2]	Primary Wetland Crossing Method	Area Affected by Construction (acres)	Area Affected by Operation (acres)	
	From	To					Operational Fill	Operational Maintenance[3,5]
CCS-W01[10]	N/A		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	ETWS	1.34[6]	1.07[10]	0.00
CCS-W02[10]	N/A		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	ETWS	0.15[6]	0.14[10]	0.00
CCS-W03[10]	N/A		Seasonally flooded basin/farmed wetland / PEM1Af	N/A	ETWS	0.87[6]	0.53[10]	0.00
Subtotal				**N/A**		**2.36**	**1.74**	**0.00**
Project Total				**450**		**3.05**	**1.74**	**0.40**

[1] Wetland Classification based on Cowardin, Classification of Wetlands and Deepwater Habitats: PFO1A – Palustrine Forested – broad leaved deciduous – temporarily flooded (Hardwood Forest, Floodplain Forest), PSS1C – Palustrine Scrub-Shrub - broad-leaved deciduous - seasonally flooded (Shrub-Carr), PSS1B – Palustrine Scrub-Shrub - broad-leaved deciduous - saturated (Shrub-Carr), PEM1Af - Palustrine Emergent – temporarily flooded - farmed (Seasonally Flooded/Farmed), PEM1B - Palustrine Emergent – seasonally saturated (Wet Meadow / Disturbed wet meadow), PEM1Bf - Palustrine Emergent – seasonally saturated - farmed (Wet Meadow / Disturbed wet meadow / Farmed), PEM1C - Palustrine Emergent – persistent - seasonally flooded (Shallow Marsh), PEM1Cf - Palustrine Emergent – persistent - seasonally flooded - farmed (Shallow Marsh / Farmed), PUBH – Palustrine Unconsolidated Bottom –permanently flooded (Shallow Open Water) – The listed classification represents the wetland community at the crossing locations.
[2] Wetland crossing lengths of pipeline.
[3] Area required to be cleared at a frequency necessary to maintain the ROW in an herbaceous state.
[4] Wetlands crossed by the Project via HDD. Northern will not conduct maintenance between the entry and exit pits; therefore, no impacts on the wetland will occur during operation.
[5] Wetland impacts will occur from routine mowing operations; however, the wetland currently consist of a PEM community, therefore no community type conversion will occur.
[6] Construction related wetland impacts will not include below-ground impacts
[7] Jurisdiction determination per USACE determination 33 CFR Part 328 on November 13, 1987.
[8] Impacts are less than 0.01 acre in size
[9] Impacts will be limited to foot traffic within a six-foot-wide travel lane between the HDD entry and exit points.
[10] Jurisdiction determined by the USACE (MVR-0423)

5.0 MINIMIZATION MEASURES

Northern will minimize impacts to wetlands during construction by following its Wetland and Waterbody Construction and Mitigation Procedures (Procedures) and implementing the following minimization measures:

- Temporary impacts to wetlands will be minimized by placement of construction mats over the travel lanes.
- Northern will limit the width of the temporary workspace in the wetlands to 75 feet except for two wetlands identified in Table 1.3-4 in Resource Report 1.

- Northern will utilize construction mats to minimize impacts from construction equipment working in wetlands. The upper one foot of topsoil from the wetlands will be segregated, except in areas of standing water, and will be used during restoration.
- Temporary erosion control measures will be placed in the wetlands immediately after initial disturbance in accordance with Northern's Procedures. Erosion control measures will be maintained in working conditions throughout construction.
- Construction equipment in the wetlands will be limited to that essential for clearing the ROW, excavating the trench, installing the pipeline, backfilling the trench and restoring the construction ROW.

Northern will control the introduction and spread of noxious weeds and invasive plants into wetlands as described in its Noxious Weed Control Plan. In addition, Northern will implement the following minimization measures:

- Northern will utilize signage, conduct environmental training and notify the contractor of the presence of the noxious weeds, locations of the wetlands and the appropriate control measures that must be taken during construction in these areas.
- Prior to excavation activities, silt fence will be installed at the boundaries of the area containing noxious weeds. The silt fence will be removed as part of final clean up. Soil excavated from the noxious weeds area will not be stored outside of the invasive plants area.
- Cleaning stations will be established at the boundaries of the noxious weed area. Equipment traveling out of the noxious weed area will be cleaned free of soil and plant debris prior to proceeding into an area without invasive plants. Water from the cleaning stations will be collected and transported off-site to an appropriate disposal facility. Equipment entering and exiting the noxious weed area will be inspected, and a recorded log of the inspections will be maintained.
- A layer of geotextile fabric or a functional equivalent will be placed under the construction mats, as needed, to further limit contact with the noxious weeds. In areas where noxious weeds are completely covered by geotextile fabric, cleaning stations may not be required during construction. Equipment used to remove the mats following construction will be cleaned and inspected prior to leaving the noxious weeds area.

6.0 RECLAMATION AND RESTORATION

Construction and restoration activities within wetlands in the Project will follow Northern's Procedures. Northern also will implement the following restoration measures:

- If necessary, trench breakers will be used at the wetland boundaries to seal the trench bottom and to maintain the original wetland hydrology. Additionally, permanent slope breakers will be installed across the construction ROW at the base of slopes greater than five percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland.
- Following construction, the disturbed wetland will be returned to pre-construction elevations to the extent possible using the segregated topsoil.
- If necessary, disturbed wetland areas will be temporarily seeded during fall of 2027 or 2028 with annual ryegrass, at a rate of 40 pounds per acre (unless standing water is present).

- Wetland revegetation will be considered successful when the vegetation has reached at least 80 percent of either the cover documented for the wetland prior to construction, or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction. Agricultural wetlands will not need to reach 80 percent and are anticipated to be farmed after construction. Successful revegetation will be determined in accordance with the criteria listed in section VI.D.5 of Northern's Procedures.
- Northern's environmental inspection team will monitor wetland revegetation until revegetation is successful. Northern will hire a qualified third-party biologist to evaluate wetland revegetation once a year until wetland revegetation fulfills the standards in its Procedures. The results of the annual evaluation will be filed with FERC. During the spring/summer of 2029 or 2030, Northern will review the status of the natural revegetation. If wetland vegetation is not successfully germinating by summer 2029 or 2030, Northern will complete a supplemental seeding within the Project wetlands. Northern will apply seed based on wetland plant species, which were observed during the pre-construction delineation and/or by the parameters listed below.
- Northern has consulted with the NRCS Project is located in, regarding approved seed mixes, planting densities and application rates The seed mixes recommended by the NRCS for wetland restoration will be consistent with the Nebraska DOT.
- Following construction, if over seeding of wetlands is required, Northern will actively seed wetlands with a wet mesic seed mix which contain plants that are beneficial to pollinators and monarchs. If required, Northern will utilize a seed or overseed using a Iowa DOT recommended seed mix per guidance located at https://ia.iowadot.gov/erl/current/US/content/9010.htm.
- Seeding will be completed via broadcast seeder at the vendor-advised rate. The ground may be scarified prior to planting supplement wetland seed to alleviate any compaction that may have occurred due to timber mat placement. The applicable state seed mix can be found in Attachment A of this plan.
- During the three years following construction, Northern will report on the status of the wetland revegetation efforts as part of its regular quarterly reporting.

7.0 MITIGATION

On March 19, 2026, Northern submitted a jurisdictional determination (JD) request to the USACE Rock Island District for review of federally regulated wetlands identified within the Clarion compressor station ESB. The USACE responded on March 23, 2026 (CEMVR-RD-2026-0273), confirming the Clarion compressor station Project component does not occur within a water of the U.S. (WOTUS), and therefore, does not require a Department of the Army Section 404 permit.

8.0 REFERENCES

USACE, 2011, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, C.V. Noble, and J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS. U.S. Army Engineer Research and Development Center.

USACE, 2010, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2), ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble.

USACE, 1992, "Clarification and Interpretation of the 1987 Manual," Memorandum from Major General Arthur E. Williams Dated March 6, 1992.

USACE, 1991, "Questions and Answers on the 1987 Manual," Memorandum from John F. Studt Dated October 7, 1991.USACE, 1987, *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

USDA, 2018, Minnesota Agronomy Technical Note # 31. Herbaceous Vegetation Establishment Guide. Version 1.5.

Iowa DOT Seeding. https://ia.iowadot.gov/erl/current/US/content/9010.htm Accessed October 30, 2025.

Appendix 2D
Agency Correspondence

From:	NWO Section 408
To:	Schmidt, Chris; NWO Section 408
Cc:	Noland, Nathan; Knabe, Susan; Chan, Ginger; Petre, Derek J CIV USARMY CENWK (USA); Nebraska 404 Regulatory Office
Subject:	408-NWO-2025-0077 RE: 408 Permission Review for Project Planning Purposes
Date:	Friday, November 7, 2025 10:12:12 AM
Attachments:	image001.png image002.png image003.png image004.png Proposed Pipeline Project_ProposedCenterline(s)&SurveyArea_9-30-25.shp.kmz

---

Chris,

The Omaha District ("District") of the U.S. Army Corps of Engineers (USACE) has received your KMZ (attached) associated with the proposed pipeline construction project under Section 14 of the Rivers and Harbors Act of 1899, 33 USC 408 (Section 408).

The District has reviewed your submittal consistent with Engineer Circular (EC) 1165-2-220, to determine whether the Section 408 request is required. We have determined that, as submitted, the project will not result in alterations to, or temporarily or permanently occupy or use, any US Army Corps of Engineers (USACE) federally authorized Civil Works project under 33 USC 408 (Section 408) within the Omaha District.

However, tit appears some of your project areas may extend into USACE Kansas City District (NWK) Civil Works Area of Responsibility. So I am cc'ing the NWK 408 Coordinator, Derek Petre, as you should coordinate with him on whether any NWK Civil Works projects are in the vicinity of your proposed project.

Additionally, this does not eliminate the requirement that you obtain other applicable Federal, State, Tribal and/or Local permits as required. One such requirement is complying with Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344), which prohibits the discharge of dredged or fill material into waters of the U.S. (WOTUS) without authorization in the form of a Department of the Army (DA) permit. USACE also regulates structures or work in, over, and under navigable waters of the United States under Section 10 of the Rivers and Harbors Act (RHA) (33 U.S.C. 403). To ensure compliance with these Acts, please contact the appropriate USACE Regulatory Office, at https://regulatory.ops.usace.army.mil/offices/. Additionally, further information regarding the Omaha District Regulatory Program can be obtained by visiting our website at https://www.nwo.usace.army.mil/Missions/Regulatory-Program/. I have cc'd the Nebraska Regulatory Office.

If you have questions regarding this determination, or if the project changes in scope or alignment and a new determination is needed, please let me know, and reference # **408-NWO-2025-0077.**

Thank you,

Adam Nebel

Section 408 Coordinator & Program Manager
U.S. Army Corps of Engineers - Omaha District
Planning Branch, CENWO-PMA-A
1616 Capitol Avenue
Omaha, NE 68102
(402) 995-2068
https://www.nwo.usace.army.mil/Missions/Civil-Works/Section-408/

From: Schmidt, Chris <Chris.Schmidt@stantec.com>
Sent: Friday, October 31, 2025 7:57 AM
To: NWO Section 408 <Section408NWO@usace.army.mil>
Cc: Noland, Nathan <Nathan.Noland@stantec.com>; Knabe, Susan <Susan.Knabe@stantec.com>; Chan, Ginger <ginger.chan@stantec.com>
Subject: [Non-DoD Source] RE: 408 Permission Review for Project Planning Purposes

Adam,

I hope you're well. I'm checking in to see if there are any updates on the Section 408 permission review we coordinated on in late September (see emails below). Please let me know if any additional information is needed from our side.

Thank you again for your time and support. I appreciate your assistance and look forward to hearing from you.

Chris Schmidt, GIT
Senior Project Manager

From: NWO Section 408 <Section408NWO@usace.army.mil>
Sent: Thursday, October 2, 2025 2:58 PM
To: Schmidt, Chris <Chris.Schmidt@stantec.com>; NWO Section 408 <Section408NWO@usace.army.mil>
Cc: Noland, Nathan <Nathan.Noland@stantec.com>; Knabe, Susan <Susan.Knabe@stantec.com>; Chan, Ginger <ginger.chan@stantec.com>
Subject: RE: 408 Permission Review for Project Planning Purposes

Hi Chris,

I have received and will review and get back to you within 30 days.

Adam Nebel
Section 408 Program Manager
U.S. Army Corps of Engineers - Omaha District
(402) 995-2068

From: Schmidt, Chris <Chris.Schmidt@stantec.com>
Sent: Tuesday, September 30, 2025 2:54 PM
To: NWO Section 408 <Section408NWO@usace.army.mil>
Cc: Noland, Nathan <Nathan.Noland@stantec.com>; Knabe, Susan <Susan.Knabe@stantec.com>; Chan, Ginger <ginger.chan@stantec.com>
Subject: [Non-DoD Source] 408 Permission Review for Project Planning Purposes

Adam,

Thank you for the conversation yesterday. Per our conversation, I have attached the KMZ associated with the proposed pipeline construction project. The KMZ contains the proposed centerline(s) and the current survey boundaries associated with the project. We are in the project planning phase and would like to avoid the need for a 408 permission for the project, if possible. Therefore, can you please review the current survey areas (represented by the blue polygons in the KMZ) associated with the project and confirm if any USACE Civil Work projects occur within it that would require a 408 permission from the USACE.

Should you have any questions, feel free to reach out to me at the contact information below.

Thank you in advance for your attention to this matter,

Chris Schmidt, GIT
Senior Project Manager

Direct: (651) 683-2206
Mobile: (612) 497-7711
chris.schmidt@stantec.com

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TELEPHONE DISCUSSION RECORD

Project Name:	Central Mainline Corridor Expansion Project	Project No.:	172609138
Client:	Northern Natural Gas Company	Date & Time:	03/16/2026 11:55AM
Individual Making Contact:	Nathan Noland	Phone No.:	402-896-0896
Agency Contacted:	USACE – Omaha District	Agency Contact:	Manda (Section 404 Regulator)

DISCUSSION

On March 16, 2026, Nathan Noland of Stantec Consulting Services Inc. contacted the U.S. Army Corps of Engineers (USACE), Omaha District Regulatory Division, to request guidance regarding Clean Water Act (CWA) Section 404 and Section 401 permitting requirements for the Central Mainline Corridor Expansion Project, including the Omaha 3rd branch line loop and the NPPD Princeton Road power station branch line.

The USACE indicated that the Platte River is not designated as a Class A State Resource Water. Based on their general understanding of the project design and installation of the pipeline beneath the Platte River via horizontal directional drilling (HDD), the crossing would not require a Pre-Construction Notification (PCN) or an individual permit under CWA Section 404. However, the USACE noted that due to the potential location of the HDD crossing, a PCN would be required under 2026 Nationwide Permit (NWP) 12, Regional Condition 18 (Endangered Species), if suitable piping plover habitat is determined to be present at the crossing by either the USACE or the U.S. Fish and Wildlife Service (USFWS).

The USACE further stated that, based on its general understanding of the project, an individual CWA Section 401 Water Quality Certification would not be required for HDD activities beneath the Platte River.

With respect to the NPPD Princeton Road power station branch line, the USACE indicated that a PCN would not be required unless the project results in direct dredging, filling, or discharge impacts to Eastern Saline Wetlands.

The USACE recommended that Northern Natural Gas Company submit a notification or application to the Omaha District Regulatory Office for the project components, along with any initial agency consultation documentation, for review. Following review, the USACE would either request a formal permit application under 2026 NWP 12 or issue written correspondence stating that no permit is required, which may be used for documentation in the Federal Energy Regulatory Commission filing.

Signature

c: Susan Knabe, Stantec

From: rrs@usace.army.mil
To: terry.plucker@nngco.com; Knabe, Susan; Noland, Nathan
Subject: Department of the Army Aquatic Resource Delineation Report Request - Central Mainline Corridor Expansion Project - Clarion compressor station
Date: Wednesday, March 18, 2026 3:38:38 PM

Some people who received this message don't often get email from rrs@usace.army.mil. Learn why this is important

The U.S. Army Corps of Engineers, Rock Island District has received your submission for a Aquatic Resource Delineation Report through the Regulatory Request System. The U.S. Army Corps of Engineers Regulatory program is committed to providing you with the highest level of public service.

Your request will be processed in the order it was received, and the assigned project manager will contact you if any additional information is required to complete the review of your request.

General information about the U.S. Army Corps of Engineers' Regulatory Program is available on the Regulatory Request System homepage at: https://rrs.usace.army.mil

Information specific for your region can be found at the Rock Island District website at: http://www.mvr.usace.army.mil/Missions/Regulatory.aspx

This mailbox is not monitored. If you have any questions, please contact your assigned project manager or reach out the Rock Island District directly.

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From: rrs@usace.army.mil
To: terry.plucker@nngco.com; Knabe, Susan; Savanah.L.Meyne@usace.army.mil; Noland, Nathan
Subject: Department of the Army Aquatic Resource Delineation Report Request: MVR-2026-00273 - Central Mainline Corridor Expansion Project - Clarion compressor station
Date: Thursday, March 19, 2026 12:45:56 PM

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The U.S. Army Corps of Engineers, Rock Island District has assigned your Aquatic Resource Delineation Report request:

File Number: MVR-2026-00273

Project Manager: Savanah L Meyne, Savanah.L.Meyne@usace.army.mil, 563-723-9176

Please reference this file number in all correspondence and communication with us concerning this request.

The U.S. Army Corps of Engineers Regulatory program is committed to providing you with the highest level of public service. Your request will be processed in the order it was received, and the assigned project manager will contact you if any additional information is required to complete the review of your request.

General information about the U.S. Army Corps of Engineers' Regulatory Program is available on the Regulatory Request System homepage at: https://rrs.usace.army.mil

Information specific for your region can be found at the Rock Island District website at: http://www.mvr.usace.army.mil/Missions/Regulatory.aspx

This mailbox is not monitored. If you have any questions, please contact your assigned project manager directly.

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Lillie, Jessica

From: Meyne, Savanah L CIV MVR <Savanah.L.Meyne@usace.army.mil>
Sent: Monday, March 23, 2026 2:35 PM
To: terry.plucker@nngco.com; Knabe, Susan
Subject: 2026-0273 - NPR
Attachments: 2026-0273 Negative AJD.pdf; 2026-0273 NPR Letter.pdf; 2026-0273 Appeal form.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

You don't often get email from savanah.l.meyne@usace.army.mil. Learn why this is important

Good afternoon,

The U.S. Army Corps of Engineers has received your no permit required request on March 19. After completing my review, I've determined the attached information. Please contact me with any questions or concerns.

Thank you,
Savanah Meyne
Regulatory Specialist | Regulatory Division | Western Branch
Rock Island District Corps of Engineers
(563) 723 - 9176 | https://www.mvr.usace.army.mil/Missions/Regulatory

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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCKTOWER BUILDING
ROCK ISLAND, ILLINOIS 61201-2004

March 23, 2026

Regulatory Division

SUBJECT: CEMVR-RD-2026-0273

Terry Plucker
Northern Natrual Gas Company
1111S 103rd St
Omaha NE
Terry.plucker@nngco.com
402-398-7226

Dear Terry Plucker,

Our office has reviewed your application received March 20, 2026 concerning the proposed Central Mainline Corridor Expansion Project located in Section 22, 092N, 025W, Wright County, Iowa, Lat: 42.7607618, Long: -93.7874063.

We have determined that your project, as proposed, does not occur in a Water of the United States and therefore does not require a Department of the Army (DA) Section 404 permit. The decision regarding this action is based on information found in the administrative record which documents the District's decision-making process, the basis for the decision, and the final decision.

This letter contains an Approved Jurisdictional Determination (AJD) for the subject site. If you object to this jurisdictional determination, you may request an administrative appeal under Corps regulations found at 33 CFR Part 331. Enclosed is a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this approved jurisdictional determination, you must submit a completed RFA form to the Mississippi Valley Division Office at the following address:

Brian Oberlies
Regulatory Appeals Review Officer
Mississippi Valley Division
1400 Walnut Street
Vicksburg, Mississippi 39180

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. It is not necessary to submit an RFA form to the Division Office if you do not object to the AJD contained in this letter.

You are advised that this determination for your project is valid for five years from the date of this letter. If the project is not completed within this five-year period or your project plans change, you should contact our office for another determination.

Although a DA permit will not be required for the project, this does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits.

The Rock Island District Regulatory Division is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete our Customer Service Survey found on our web site at https://regulatory.ops.usace.army.mil/ords/f?p=136:4 (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?).

Should you have any questions, please contact our Regulatory Division by letter, email savanah.l.meyne@usace.army.mil or telephone Savanah Meyne, 563-723-9176

Sincerely,

Abigail A. Steele

Abigail Steele
Chief, Western Branch
Regulatory Division

cc:
Susan Knabe
Stantec Consulting Services Inc
1165 Scheuring Rd
De Pere WI, 54115
susan.knabe@stantec.com
920-655-7215

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Terry Plucker & Susan Knabe	File Number: CEMVR-RD-2026-0273	Date: March 20, 2026

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Savanah Meyne USACE – Rock Island District – Regulatory Branch P.O. Box 2004 Rock Island, IL 61204 563-723-9167	Administrative Appeals Review Officer Mississippi Valley Division U.S. Army Corps of Engineers 1400 Walnut Street Vicksburg, MS 39181-0080 601-634-5820

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

CEMVR-RDW March 23, 2026

MEMORANDUM FOR RECORD

SUBJECT: US Army Corps of Engineers (Corps) Pre-2015 Regulatory Regime Approved Jurisdictional Determination in Light of *Sackett v. EPA*, 143 S. Ct. 1322 (2023) , MVR-0423 (MFR 1 of 1)

BACKGROUND. An Approved Jurisdictional Determination (AJD) is a Corps document stating the presence or absence of waters of the United States on a parcel or a written statement and map identifying the limits of waters of the United States on a parcel. AJDs are clearly designated appealable actions and will include a basis of JD with the document.[1] AJDs are case-specific and are typically made in response to a request. AJDs are valid for a period of five years unless new information warrants revision of the determination before the expiration date or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.[2] For the purposes of this AJD, we have relied on section 10 of the Rivers and Harbors Act of 1899 (RHA),[3] the Clean Water Act (CWA) implementing regulations published by the Department of the Army in 1986 and amended in 1993 (references 2.a. and 2.b. respectively), the 2008 *Rapanos-Carabell* guidance (reference 2.c.), and other applicable guidance, relevant case law and longstanding practice, (collectively the pre-2015 regulatory regime), and the *Sackett* decision (reference 2.d.) in evaluating jurisdiction.

This Memorandum for Record (MFR) constitutes the basis of jurisdiction for a Corps AJD as defined in 33 CFR §331.2. The features addressed in this AJD were evaluated consistent with the definition of “waters of the United States” found in the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. This AJD did not rely on the 2023 “Revised Definition of ‘Waters of the United States,’” as amended on 8 September 2023 (Amended 2023 Rule) because, as of the date of this decision, the Amended 2023 Rule is not applicable in Iowa due to litigation.

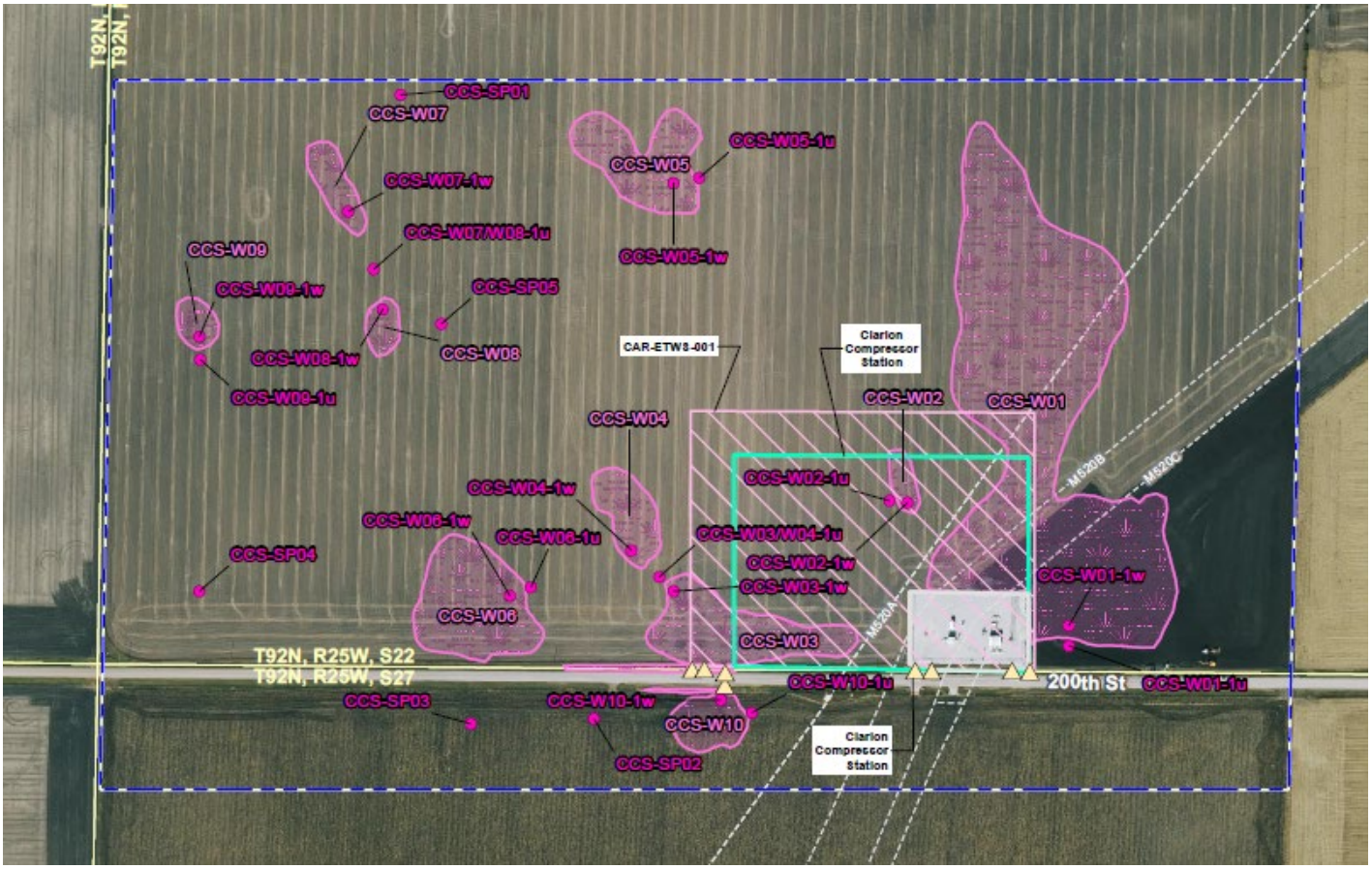
1. SUMMARY OF CONCLUSIONS.

[1] 33 CFR 331.2.
[2] Regulatory Guidance Letter 05-02.
[3] USACE has authority under both Section 9 and Section 10 of the Rivers and Harbors Act of 1899 but for convenience, in this MFR, jurisdiction under RHA will be referred to as Section 10.

a. Provide a list of each individual feature within the review area and the jurisdictional status of each one (i.e., identify whether each feature is/is not a water of the United States and/or a navigable water of the United States).

Appendix B. Aquatic Resource Inventory:

Aquatic Resource Name	*State*	*Cowardin System*	*Cowardin Class*	*HGM Class*	*Local Waterway Name*	*Measurement Type*	*Measurement Amount*	*Measurement Units*	*Waters Type*	*Latitude*	*Longitude*
CCS-W01	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	7.72	ACRE		42.7622306	-93.7863729
CCS-W02	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	0.15	ACRE		42.7618851	-93.7875473
CCS-W03	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	1.26	ACRE		42.7609429	-93.7891224
CCS-W04	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	0.49	ACRE		42.7616618	-93.7898385
CCS-W05	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	0.98	ACRE		42.7638589	-93.789728
CCS-W06	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	1.3	ACRE		42.7611025	-93.7911052
CCS-W07	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	0.32	ACRE		42.7636609	-93.7922877
CCS-W08	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	0.17	ACRE		42.7628005	-93.7918856
CCS-W09	IOWA	PALUSTRINE	PEM-PALUSTRINE,			Area	0.19	ACRE		42.7628119	-93.7934355
CCS-W10	IOWA	PALUSTRINE	PEM-PALUSTRINE, EMERGENT			Area	0.42	ACRE		42.760437	-93.7892042



2. REFERENCES.

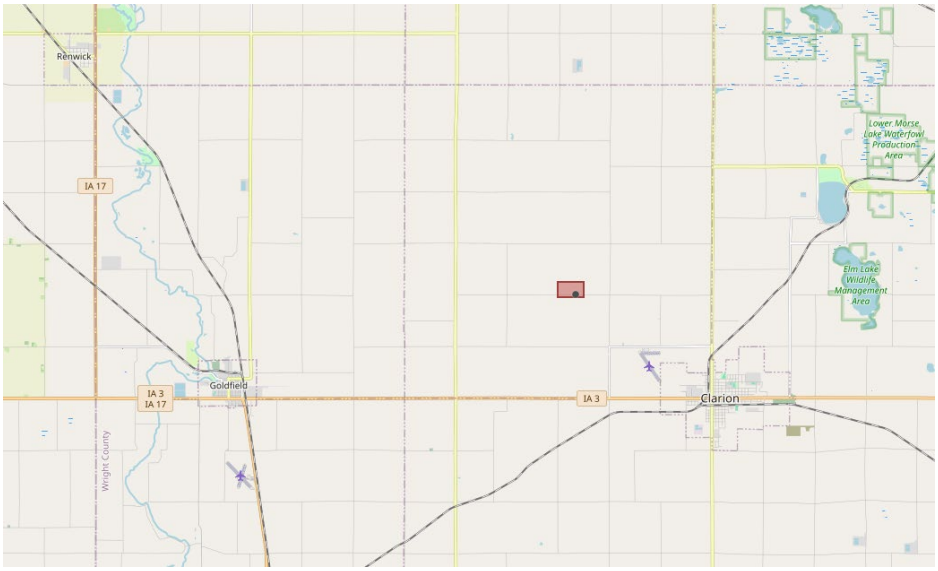
   a. Final Rule for Regulatory Programs of the Corps of Engineers, 51 FR 41206 (November 13, 1986).

   b. Clean Water Act Regulatory Programs, 58 FR 45008 (August 25, 1993).

   c. U.S. EPA & U.S. Army Corps of Engineers, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* (December 2, 2008)

   d. *Sackett v. EPA*, 598 U.S., 143 S. Ct. 1322 (2023)

3. REVIEW AREA.



The review area is approximately 16.6 acres of an agricultural field located in Section 22, 092N, 025W, Wright County, Iowa, Lat: 42.7607618, Long: -93.7874063.

4. NEAREST TRADITIONAL NAVIGABLE WATER (TNW), THE TERRITORIAL SEAS, OR INTERSTATE WATER TO WHICH THE AQUATIC RESOURCE IS CONNECTED.
N/A

5. FLOWPATH FROM THE SUBJECT AQUATIC RESOURCES TO A TNW, THE TERRITORIAL SEAS, OR INTERSTATE WATER.
There is no overland flow.

6. SECTION 10 JURISDICTIONAL WATERS[4]: Describe aquatic resources or other features within the review area determined to be jurisdictional in accordance with Section 10 of the Rivers and Harbors Act of 1899. Include the size of each aquatic resource or other feature within the review area and how it was determined to be jurisdictional in accordance with Section 10.[5]

[4] 33 CFR 329.9(a) A waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of such use because of changed conditions or the presence of obstructions.
[5] This MFR is not to be used to make a report of findings to support a determination that the water is a navigable water of the United States. The district must follow the procedures outlined in 33 CFR part

N/A

7. SECTION 404 JURISDICTIONAL WATERS: Describe the aquatic resources within the review area that were found to meet the definition of waters of the United States in accordance with the pre-2015 regulatory regime and consistent with the Supreme Court's decision in *Sackett*. List each aquatic resource separately, by name, consistent with the naming convention used in section 1, above. Include a rationale for each aquatic resource, supporting that the aquatic resource meets the relevant category of "waters of the United States" in the pre-2015 regulatory regime. The rationale should also include a written description of, or reference to a map in the administrative record that shows, the lateral limits of jurisdiction for each aquatic resource, including how that limit was determined, and incorporate relevant references used. Include the size of each aquatic resource in acres or linear feet and attach and reference related figures as needed.

   a. Traditional Navigable Waters (TNWs) (a)(1)(i): N/A

   b. The Territorial Seas (a)(1)(ii): N/A

   c. Interstate Waters (a)(1)(iii): N/A

   d. Impoundments (a)(2): N/A

   e. Tributaries (a)(3): N/A

   f. Adjacent Wetlands (a)(4): N/A

   g. Additional Waters (a)(5): N/A

8. NON-JURISDICTIONAL AQUATIC RESOURCES AND FEATURES

   a. Describe aquatic resources and other features within the review area identified as "generally non-jurisdictional" in the preamble to the 1986 regulations (referred to as "preamble waters").[6] Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA as a preamble water. N/A

329.14 to make a determination that water is a navigable water of the United States subject to Section 10 of the RHA.

[6] 51 FR 41217, November 13, 1986.

b. Describe aquatic resources and features within the review area identified as "generally not jurisdictional" in the *Rapanos* guidance. Include size of the aquatic resource or feature within the review area and describe how it was determined to be non-jurisdictional under the CWA based on the criteria listed in the guidance. N/A

c. Describe aquatic resources and features identified within the review area as waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA. Include the size of the waste treatment system within the review area and describe how it was determined to be a waste treatment system. N/A

d. Describe aquatic resources and features within the review area determined to be prior converted cropland in accordance with the 1993 regulations (reference 2.b.). Include the size of the aquatic resource or feature within the review area and describe how it was determined to be prior converted cropland. N/A

e. Describe aquatic resources (i.e. lakes and ponds) within the review area, which do not have a nexus to interstate or foreign commerce, and prior to the January 2001 Supreme Court decision in "*SWANCC*," would have been jurisdictional based solely on the "Migratory Bird Rule." Include the size of the aquatic resource or feature, and how it was determined to be an "isolated water" in accordance with *SWANCC*. N/A

f. Describe aquatic resources and features within the review area that were determined to be non-jurisdictional because they do not meet one or more categories of waters of the United States under the pre-2015 regulatory regime consistent with the Supreme Court's decision in *Sackett* (e.g., tributaries that are non-relatively permanent waters; non-tidal wetlands that do not have a continuous surface connection to a jurisdictional water).

   i. **CCS-W01:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W01 is considered non-jurisdictional.
   ii. **CCS-W02:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W02 is considered non-jurisdictional.
   iii. **CCS-W03:** A linear relic low spot that exists within a roadside swale. This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W03 is considered non-jurisdictional.

iv. **CCS-W04:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W04 is considered non-jurisdictional.

v. **CCS-W05:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W05 is considered non-jurisdictional.

vi. **CCS-W06:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W06 is considered non-jurisdictional.

vii. **CCS-W07:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W07 is considered non-jurisdictional.

viii. **CCS-W08:** This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W08 is considered non-jurisdictional.

ix. **CCS-W09:** wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W09 is considered non-jurisdictional.

x. **CCS-W010:** is a linear relic low spot that exists within a roadside swale. This wetland is isolated and lacks a continuous surface connection to a relatively permanent or traditionally navigable water. Therefore, Wetland W10 is considered non-jurisdictional.

Stantec

Central Mainline Corridor Expansion Project – Clarion Compressor Station
Northern Natural Gas
Photos taken November 3, 2025

Wetland Delineation Report
Wright County, Iowa
Stantec Project #: 172609221

Photo 1. View from wetland point CCS-W01-1w, photo taken facing north.

Photo 2. View from upland point CCS-W01-1u, photo taken facing east.

Photo 3. View from wetland point CCS-W02-1w, photo taken facing north.

Photo 4. View from upland point CCS-W02-1u, photo taken facing south.

Photo 5. View from wetland point CCS-W03-1w, point taken facing south.

Photo 6. View from upland point CCS-W03/W04-1u, point taken facing east.

Photo 7. View from wetland point CCS-W04-1w, photo taken facing north.

Photo 8. View from wetland point CCS-W05-1w, photo taken facing north.

Stantec
Central Mainline Corridor Expansion Project – Clarion Compressor Station
Northern Natural Gas
Photos taken November 3, 2025

Wetland Delineation Report
Wright County, Iowa
Stantec Project #: 172609221

Photo 17. View from wetland point CCS-W10-1w, photo taken facing west.

Photo 18. View from upland point CCS-W10-1u, photo taken facing north.

Photo 19. View of maintained rights-of-way (ROW), photo taken facing east.

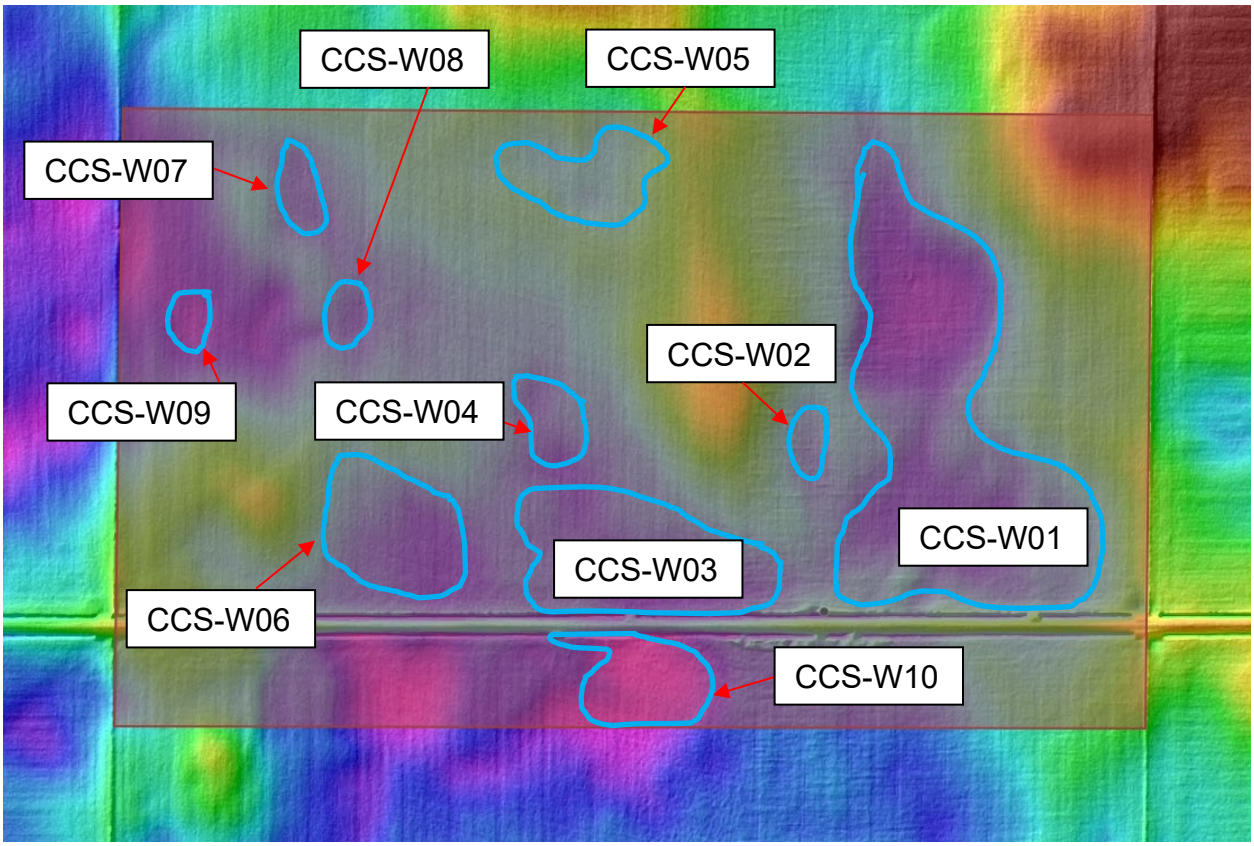
Photo 20. View of Northern's existing Ogden to Ventura pipeline valve 7 setting, photo taken facing north.

9. DATA SOURCES. List sources of data/information used in making determination. Include titles and dates of sources used and ensure that information referenced is available in the administrative record.

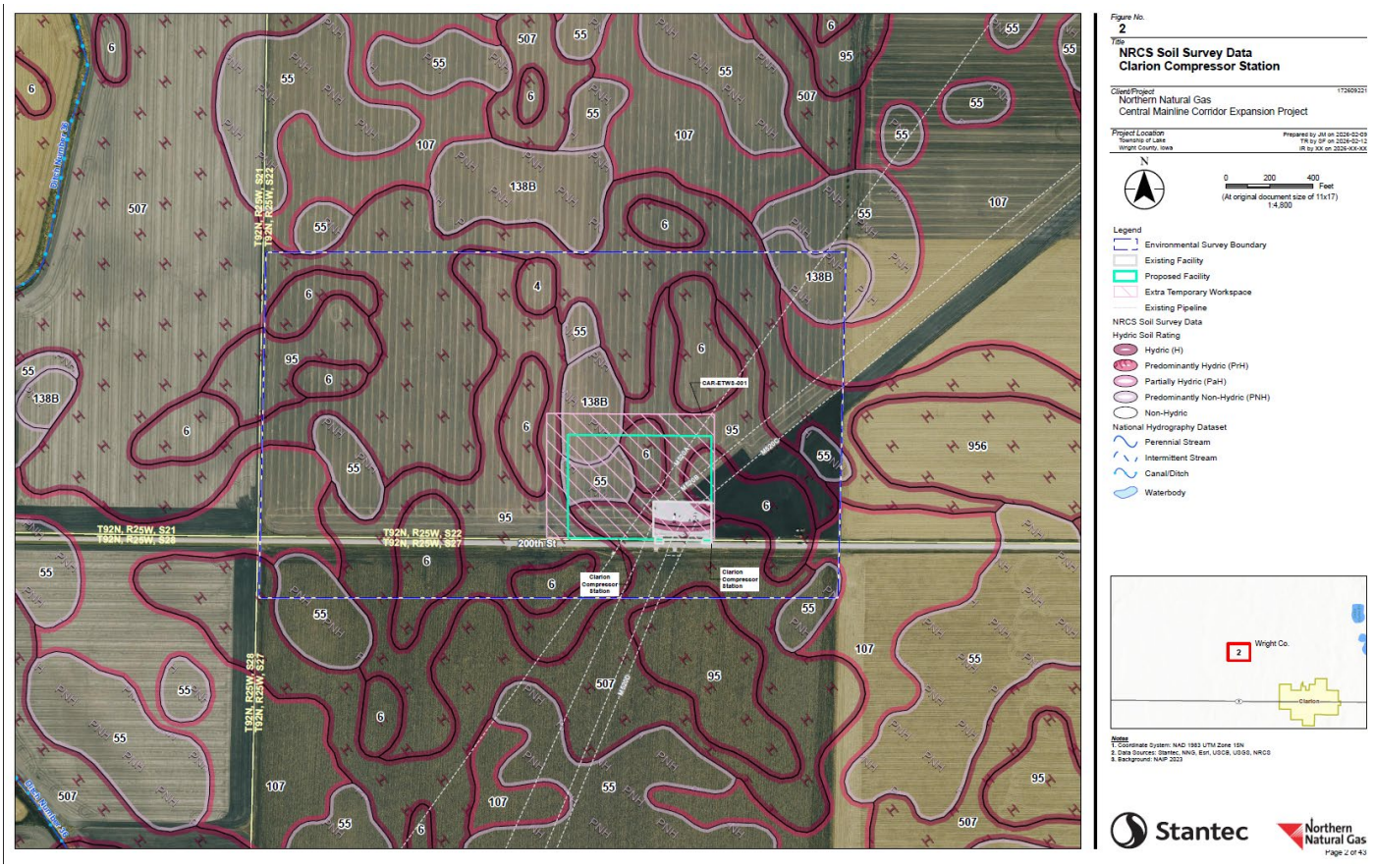
   a. Office evaluation completed March 20, 2026

   b. Wetland delineation, provided by Westwood, conducted November 3, 2025.

c. Regulatory Viewer (accessed March 20, 2026): Aerial 2023; LiDAR;



d. Soil photos from provided wetland delineation



10. OTHER SUPPORTING INFORMATION. N/A

11. NOTE: The structure and format of this MFR were developed in coordination with the EPA and Department of the Army. The MFR's structure and format may be subject to future modification or may be rescinded as needed to implement additional guidance from the agencies; however, the approved jurisdictional determination described herein is a final agency action.